DRAFT ENVIRONMENTAL IMPACT REPORT

SNOWCREEK VIII, SNOWCREEK MASTER PLAN UPDATE - 2007 PROJECT

Lead Agency:
Town of Mammoth Lakes
Community Development Department
PO Box 1609
Mammoth Lakes, CA 93546

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Submitted to:

Town of Mammoth Lakes
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TABLE OF CONTENTS

Section			Page
I.		INTRODUCTION/SUMMARY	I-1
	A.	INTRODUCTION	I-1
	B.	PURPOSE OF THE EIR	I-1
	C.	PROPOSED PROJECT	I-2
	D.	AREAS OF KNOWN CONTROVERSY/ISSUES	I-3
	E.	ALTERNATIVES	I-4
	F.	SUMMARY OF ENVIRONMENTAL IMPACTS & MITIGATION MEASURES	I-5
II.		ENVIRONMENTAL SETTING	II-1
	A.	INTRODUCTION	II-1
	B.	EXISTING CONDITIONS	II-1
	C.	RELATED PROJECTS	II-23
III.		PROJECT DESCRIPTION	III-1
	A.	PROJECT APPLICANT	III-1
	B.	PROJECT CHARACTERISTICS	III-1
	C.	PROJECT OBJECTIVES	III-43
	D.	DISCRETIONARY ACTIONS	III-46
IV.		ENVIRONMENTAL IMPACT ANALYSIS	IV.A-1
	A.	IMPACTS FOUND TO BE LESS THAN SIGNIFICANT	IV.A-1
	B.	AESTHETICS	IV.B-1
	C.	AIR QUALITY	IV.C-1
	D.	BIOLOGICAL RESOURCES	IV.D-1
	E.	CULTURAL RESOURCES	IV.E-1
	F.	GEOLOGY AND SOILS	IV.F-1
	G.	HYDROLOGY AND WATER QUALITY	IV.G-1
	H.	LAND USE AND PLANNING	IV.H-1
	I.	NOISE	IV.I-1
	J.	POPULATION AND HOUSING	IV.J-1
	K.	PUBLIC SERVICES	IV.K-1
	L.	RECREATION	IV.L-1

M. TRANSPORTATION AND TRAFFIC IV.M-1
N. UTILITIES AND SERVICE SYSTEMS IV.N-1

V. GENERAL IMPACT CATEGORIES V-1

A. SUMMARY OF SIGNIFICANT UNAVOIDABLE IMPACTS V-1
B. GROWTH INDUCING IMPACTS OF THE PROPOSED PROJECT V-2
C. SIGNIFICANT IRREVERSIBLE CHANGES TO THE ENVIRONMENT V-5

VI. ALTERNATIVES TO THE PROPOSED PROJECT VI-1

A. ALTERNATIVE A: NO PROJECT – 1981 SNOWCREEK MASTER PLAN VI-7
B. ALTERNATIVE B: ALTERNATE SITE PLAN VI-14
C. ALTERNATIVE C: REDUCED DENSITY VI-21
D. ALTERNATIVE D: INCREASED DENSITY VI-28
E. ENVIRONMENTALLY SUPERIOR ALTERNATIVE VI-35

VII. PREPARERS OF THE EIR AND PERSONS CONSULTED VII-1

VIII. REFERENCES VIII-1

APPENDICES

(Under Separate Cover)

APPENDIX A:	NOTICE OF PREPARATION (NOP) AND INITIAL STUDY
APPENDIX B:	RESPONSES TO NOP AND EIR SCOPING MEETING
APPENDIX C:	AIR QUALITY DATA
APPENDIX D:	BIOLOGY DATA
APPENDIX E:	CULTURAL RESOURCES REPORT AND PEER REVIEW LETTER
APPENDIX F:	GEOTECHNICAL/HAZARDS REPORTS AND PEER REVIEW COMMENTS
APPENDIX G:	HYDROLOGY DATA
APPENDIX H:	NOISE DATA
APPENDIX I:	LETTERS FROM PUBLIC SERVICE AND UTILITY AGENCIES
APPENDIX J:	TRAFFIC DATA
APPENDIX K:	LAND EXCHANGE COVENANT
APPENDIX L:	WATER SUPPLY ASSESSMENT
APPENDIX M:	TOWN OF MAMMOTH LAKES DEVELOPER IMPACT FEE SCHEDULE REVISED JUNE 2007
APPENDIX N:	AFFORDABLE HOUSING MITIGATION PLAN LETTER

FIGURES

Figure		Page
Figure II-1	Regional and Vicinity Map	II-2
Figure II-2	Aerial Photograph	II-3
Figure II-3	Project Areas Map	II-7
Figure II-4	Zoning Map	II-11
Figure II-5	Views of the Project Site A (Views 1, 2 and 3)	II-13
Figure II-6	Views of the Project Site B (Views 4, 5 and 6)	II-15
Figure II-7	Views of Surrounding Uses A (Views 7, 8 and 9)	II-17
Figure II-8	Views of Surrounding Uses B (Views 10, 11 and 12)	II-19
Figure II-9	Views of Surrounding Uses C (Views 13, 14 and 15)	II-21
Figure II-10	Related Projects Map	II-29
Figure III-1	Developed or Under Construction Area for Snowcreek Master Plan	III-5
Figure III-2	Proposed New Development Areas for 2007 Master Plan	III-7
Figure III-3	Land Exchange Boundary	III-13
Figure III-4	Illustrative Conceptual Plan	III-17
Figure III-5	Market/General Store and the Natural Resources and Historic Interpretive Center	III-21
Figure III-6	Hotel Level One Floor Plan	III-24
Figure III-7	Low Density Units	III-27
Figure III-8	Medium Density Multi-Family Units	III-29
Figure III-9	High Density Multi-Family Units	III-31
Figure III-10	Outfitters' Cabin	III-35
Figure III-11	Resident's Club and Management Offices	III-37
Figure IV.B-1	Major View Corridors and Vistas	IV.B-7
Figure IV.B-2	Viewpoint Location Map	IV.B-9
Figure IV.B-3	View 1, Old Mammoth Road & Minaret Road, Looking South	IV.B-13
Figure IV.B-4	View 2, Old Mammoth Road & Sherwin Creek Road, Looking South	IV.B-15
Figure IV.B-5	View 3, Minaret Road, Looking South	IV.B-17
Figure IV.B-6	View 4, Sherwin Creek Road, Looking West	IV.B-19
Figure IV.B-7	View 5, U.S. Forest Service Land to the West of Sherwin Creek Road	IV.B-23
Figure IV.B-8	View 6, Panorama Dome, Looking East	IV.B-25
Figure IV.B-9	View 1, Old Mammoth Road and Minaret Road with Project	IV.B-37
Figure IV.B-10	View 2, Old Mammoth Road & Sherwin Creek Road with Project	IV.B-39
Figure IV.B-11	View 3, Minaret Road with Project	IV.B-41
Figure IV.B-12	View 4, Sherwin Creek Road, Looking West with Project	IV.B-45
Figure IV.B-13	View 5, U.S. Forest Service Land to the West of Sherwin Creek Road with Project	IV.B-47
Figure IV.B-14	View 6, Panorama Dome with Project	IV.B-49

Figure IV.D-1	Plant Communities	IV.D-21
Figure IV.F-1	Regional Seismicity Map	IV.F-5
Figure IV.G-1	On-Site Drainage – Residential/Commercial Site	IV.G-5
Figure IV.G-2	Off-Site Drainage – Golf Course Area	IV.G-6
Figure IV.G-3	100-Year Flood Limit	IV.G-7
Figure IV.M-1	Study Area Intersections and Circulation System	IV.M-2
Figure IV.M-2	Study Area Intersections Geometrics and Control Devices	IV.M-7
Figure IV.M-3	Existing Condition Typical Winter Saturday Peak Hour Traffic Volumes	IV.M-8
Figure IV.M-4	Approved Project Locations and Trip Assessment	IV.M-10
Figure IV.M-5	Cumulative Baseline Typical Winter Saturday Peak Hour Traffic Volumes	IV.M-11
Figure IV.M-6	Snowcreek Project Trip Distribution and Assignment	IV.M-16
Figure IV.M-7	Existing Plus Project Typical Winter Saturday Peak Hour Traffic Volumes	IV.M-17
Figure IV.M-8	Cumulative Plus Project Typical Winter Saturday Peak Hour Traffic Volumes	IV.M-19
Figure IV.N-1	Existing Water and Sewer Lines	IV.N-9
Figure VI-1	Alternative A: No Project Alternative 1981 Master Plan Buildout	VI-9
Figure VI-2	Alternative B: Revised Site Alternative Plan	VI-15
Figure VI-3	Alternative C: Reduced Density Alternative	VI-23
Figure VI-4	Alternative D: Increased Density Alternative	VI-29

TABLES

Table		Page
Table I-1	Summary of Significant Impacts and Mitigation Measures	I-7
Table II-1	Related Projects	II-23
Table III-1	Development Areas of the 1975 and 1981 Master Plans	III-3
Table III-2	Proposed 2006 Master Plan	III-4
Table III-3	Proposed 2006 Master Plan Development Summary	III-15
Table IV.B-1	Consistency with 1987 General Plan Applicable Aesthetics Policies	IV.B-27
Table IV.B-2	Consistency with 2007 General Plan Applicable Aesthetics Policies	IV.B-31
Table IV.C-1	Global Warming Potentials and Atmospheric Lifetimes	IV.C-8
Table IV.C-2	Federal and State Ambient Air Quality Standards	IV.C-16
Table IV.C-3	PM_{10} and PM_{25} Concentration in the Mammoth Lakes Region	IV.C-18
Table IV.C-4	Ambient Air Quality Ozone and CO Standards and Monitoring Data Near the Project Area	IV.C-19
Table IV.C-5	Estimated Daily Construction Emissions	IV.C-23
Table IV.C-6	Estimated Mitigated Daily Construction Emissions	IV.C-26
Table IV.C-7	Estimated Daily Operational Emissions	IV.C-29
Table IV.C-8	PM_{10} Emissions for the Town of Mammoth Lakes as Outlined in the AQMP	IV.C-30
Table IV.C-9	Summary of Localized CO Analysis (1 hour) for the Project	IV.C-32
Table IV.C-10	Summary of Localized CO Analysis (8-hour) for the Project	IV.C-35
Table IV.C-11	Carbon Dioxide Emissions	IV.C-34
Table IV.C-12	Methane Emissions	IV.C-35
Table IV.C-13	Nitrous Oxide Emissions	IV.C-35
Table IV.C-14	Project Compliance with 2006 CAT Report Greenhouse Gas Emissions Reduction Strategies	IV.C-37
Table IV.C-15	Net Emissions of PM_{10} from Snowcreek VIII	IV.C-41
Table IV.D-1	Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area	IV.D-25
Table IV.F-1	Regional Faults and Seismicity	IV.F-4
Table IV.F-2	Seismic Design Parameters	IV.F-11
Table IV.G-1	Designated Beneficial Uses of Mammoth Creek	IV.G-12
Table IV.H-1	Existing Land Use and Zoning On-Site	IV.H-3
Table IV.H-2	Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan	IV.H-22
Table IV.H-3	Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan	IV.H-42
Table IV.I-1	Representative Environmental Noise Levels	IV.I-2

Table IV.I-2	Reaction of People and Damage to Buildings at Various Continuous Vibration Levels	IV.I-5
Table IV.I-3	Noise and Land Use Compatibility Criteria	IV.I-6
Table IV.I-4	Town of Mammoth Lakes Exterior Noise Limits	IV.I-8
Table IV.I-5	Town of Mammoth Lakes Construction Noise Standards	IV.I-10
Table IV.I-6	Existing (Winter 2005) Roadway Noise Levels Onsite	IV.I-12
Table IV.I-7	Existing (Winter 2005) Roadway Noise Levels Offsite	IV.I-13
Table IV.I-8	Noise Ranges of Typical Construction Equipment	IV.I-16
Table IV.I-9	Typical Outdoor Construction Noise Levels	IV.I-17
Table IV.I-10	Vibration Source Levels for Construction Equipment	IV.I-19
Table IV.I-11	Future Plus Project Roadway Noise Levels Onsite	IV.I-22
Table IV.I-12	Future Off-Site Future Roadway Noise Levels	IV.I-23
Table IV.I-13	Cumulative Roadway Noise Levels	IV.I-27
Table IV.J-1	Housing Unit Growth Trends (1990-2024)	IV.J-1
Table IV.J-2	Mammoth Lakes Fair Share of Regional Housing Needs (2001-2008)	IV.J-3
Table IV.J-3	Population Growth Trends (1970-2024)	IV.J-4
Table IV.J-4	Employment by History 2000	IV.J-5
Table IV.J-5	Estimated Employee Generation	IV.J-7
Table IV.K-1	County of Mono California Crime Index (CCI), 2004-2005	IV.K-2
Table IV.K-2	Fire Stations that Serve the Project Area	IV.K-6
Table IV.K-3	School Data for Project and Vicinity	IV.K-10
Table IV.K-4	Student Generation Rates for MUSD	IV.K-12
Table IV.K-5	Park Areas Near the Project Site	IV.K-13
Table IV.L-1	Active and Planned Parkland Owned by or Available to the Town	IV.L-3
Table IV.L-2	Recreational Facilities in Mammoth Lakes	IV.L-4
Table IV.M-1	Intersection LOS Descriptions	IV.M-4
Table IV.M-2	Level of Service Parameters	IV.M-5
Table IV.M-3	Existing (2005) Typical Winter Saturday Intersection LOS	IV.M-6
Table IV.M-4	Cumulative Typical Winter Saturday Intersection Levels of Service	IV.M-9
Table IV.M-5	Project Trip Generation	IV.M-14
Table IV.M-6	Existing Plus Project Typical Winter Saturday Intersection Levels of Service	IV.M-14
Table IV.M-7	Cumulative Plus Project Typical Winter Saturday Intersection Levels of Service	IV.M-20
Table IV.M-8	Long-Range Typical Winter Saturday Intersection Levels of Service	IV.M-24
Table IV.N-1	Project Estimated Wastewater Demands	IV.N-6
Table IV.N-2	Estimated Average Day and Peak Day Wastewater Generation for Project and Related Projects	IV.N-11
Table IV.N-3	Existing Water Supply Reliability	IV.N-17
Table IV.N-4	Annual Volumes of Groundwater Pumped	IV.N-19

Table IV.N-5	Past, Current, and Projected Water Use	IV.N-21
Table IV.N-6	Current Supply and Demand Without Project	IV.N-22
Table IV.N-7	Future Water Supplies	IV.N-24
Table IV.N-8	Existing Water Supply Reliability Plus 2025 Future Water Sources	IV.N-25
Table IV.N-9	Project Estimated Water Demands	IV.N-28
Table IV.N-10	Existing Water Supply Comparison of Current Supply and Demand With Project Plus Related Projects	IV.N-31
Table IV.N-11	2025 Future Water Sources Comparison of Supply and Demand With Project Plus Related Projects	IV.N-32
Table VI-1	Alternatives Project Components Comparison	VI-6
Table VI-2	Alternatives Impacts Comparison	VI-36

I. INTRODUCTION/SUMMARY

A. INTRODUCTION

The purpose of the Introduction/Summary is to provide the reader with a clear and simple description of the Project and its potential significant environmental impacts. Section 15123 of the *CEQA Guidelines* requires that the summary identify each significant effect and recommended mitigation measures and alternatives that would minimize or avoid potential significant impacts. The summary is also required to identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public, and issues to be resolved, including the choice among alternatives and whether or how to mitigate significant effects. This section focuses on the major areas of the Project that are important to decision-makers and uses non-technical language to promote understanding. This summary is intended as an overview and should be used in conjunction with a thorough reading of the Draft Environmental Impact Report (Draft EIR). The text of this report, including figures, tables, and appendices, serve as the basis for this summary.

The subject of this Draft EIR is the proposed Snowcreek VIII, Snowcreek Master Plan Update - 2007 Project (Project).[1] Upon certification, this Draft EIR will update and supersede the Town of Mammoth Lakes' 1974 and 1981 EIRs for the previous iterations of the Snowcreek Master Plan. A detailed description of the Project is contained in Section III (Project Description) of this report.

Because the Project will require approval of certain discretionary actions by the Town of Mammoth Lakes (Town), the Project is subject to the California Environmental Quality Act (CEQA), for which the Town is the designated Lead Agency. The Town's Planning Division administers the process by which environmental documents for private projects are prepared and reviewed. On the basis of these procedures, it was determined that the Project may have a significant effect on the environment and that an EIR should be prepared.

B. PURPOSE OF THE EIR

The Town has commissioned this EIR on the Project for the following purposes:

- To satisfy CEQA requirements.
- To inform the general public, the local community, and responsible, trustee, and state and federal agencies of the nature of the Project, its potentially significant environmental effects, feasible

[1] *At the time the Notice of Preparation (NOP) was distributed on October 16, 2006, the Project was referred to as the 2006 Revised Snowcreek Master Plan. However, the Project has since been renamed to remain consistent with the current year.*

mitigation measures to mitigate those effects, and reasonable and feasible alternatives to the Project.

- To enable the Town to consider the environmental consequences of approving the Project.
- For consideration by responsible agencies in issuing permits and approvals for the Project.

As described in §15121 (a) and 15362 of the *CEQA Guidelines*, an EIR is an informational document that will inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to a project. The purpose of this EIR, therefore, is to focus the discussion on those potential effects on the environment of the Project that the Lead Agency has determined are or may be significant. In addition, feasible mitigation measures are required, when applicable, that could reduce significant impacts to insignificant levels.

The Lead Agency is required to consider the information in the EIR, along with any other relevant information, in making its decision on the Project. Although the EIR does not determine the ultimate decision that will be made regarding implementation of the Project, CEQA requires the Town to consider the information in the EIR and make findings regarding each significant effect of the Project.

This Draft EIR was prepared in accordance with §15151 of the *CEQA Guidelines*, which defines the standards for EIR adequacy:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR would summarize the main points of disagreement among the experts. The courts have looked not for perfection; but for adequacy, completeness, and a good faith effort at full disclosure.*

C. PROPOSED PROJECT

The Project consists of adoption by the Town of the Snowcreek VIII, Snowcreek Master Plan Update - 2007 (2007 Master Plan) to revise the Updated Master Plan for Snowcreek at Mammoth (1981 Master Plan), which was an update of the original Snowcreek Master Plan (1974 Master Plan). The 2007 Master Plan or Project addresses proposed build-out of the remaining Snowcreek Master Plan area (i.e., Snowcreek VIII) and is intended to fulfill the vision of the previously approved master plans.

The Project proposes the development of 850 residential dwelling units, 400 Hotel rooms/suites, and up to 75,000[2] square feet for non-residential uses on a total of approximately 237 acres. The following provides a brief account of these components:

- **Residential:** The residential component could include a mix of residential uses from condominium units, single family dwellings, stacked flats and townhomes that will vary in size from 650 square feet (minimum) to 3,500 square feet (maximum). A Resident's Club with a snack bar, pool, spa and grill will accompany this component.

- **Resort:** The resort component will include 400 guest suites that will be part hotel, part Private Residence Club (PRC)/suite units or the like. The resort will also include retail space, a lounge, a fitness area, a pool, a spa/wellness center, and an ice skating pond.

- **Recreation:** While recreational amenities are incorporated throughout the Project, additional stand-alone recreational components will include a Golf Clubhouse, an expanded golf course and attendant facilities, and the Outfitters' Cabin. The existing privately owned publicly accessible nine-hole golf course on the north and west portions of the Project site will be expanded to include nine additional holes on the east and south edges of the Project site, thus creating a privately owned publicly accessible 18-hole golf course.

- **Retail:** In addition to the retail space provided at the resort, a stand-alone Market/General Store (The Store) will be incorporated into the Project. The Store will serve the "Old Mammoth" portion of the Town with food, deli, drinks, and sundries. The Store draws inspiration from the historic Lutz Market during the early settlement days of Mammoth Camp.

- **Public Amenities:**[3] In addition to public amenities provided in the expanded and enhanced golf course facilities, the Project will include amenities to enhance public recreational opportunities and support economic stability. These amenities will include a Natural Resources and Historic Interpretive Center (Interpretive Center), an Outfitters' Cabin, and the provision of Hotel rooms/suites, restaurants, retail, and conference facilities.

D. AREAS OF KNOWN CONTROVERSIES

Section 15123 of the *CEQA Guidelines* requires an EIR to identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public, and issues to be resolved.

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[2] *This number has increased from 50,000 square feet since the Notice of Preparation (NOP) was distributed on October 16, 2006.*

[3] *A propane tank farm while located on Snowcreek property is no longer part of the Project application and is treated as a related project for the purposes of analyzing cumulative impacts. The applicant for the propane tank farm is Turner Propane.*

Environmental concerns raised at the EIR scoping meeting and in letters submitted to the Town of Mammoth Lakes in response to the Notice of Preparation (NOP) of the EIR include:

- Biological impacts (native shrub habitat, songbird migration)
- Recreation impacts (public access to Kerry Meadow, loss of driving range, public golf course, location of Outfitter's Cabin, access to the Sherwin Mountain Range)
- Transportation impacts (SR 203 including US 395/SR 203 Interchange)
- Land use
- Undiscovered archaeological and cultural resources
- Density
- Aesthetics (building heights and setbacks, blocked views)
- Increased traffic
- Water supply
- Watershed drainage
- Water flow and pressure requirements (associated with building heights)
- Water quality, low-impact development standards
- Emergency and evacuation plans
- Increased demand on public services
- Snow removal and storage
- Fire safety and increased service demand

E. ALTERNATIVES

This EIR considers a range of alternatives to the Project to provide informed decision-making in accordance with §15126(d) of the *CEQA Guidelines*. The alternatives analyzed in this EIR include: A) No Project (required by CEQA) – this would be buildout of the site under the existing entitlements and existing 1981 Master Plan, B) Revised Site Plan – same number of units but an alternate configuration designed to minimize impacts. C) Reduced Density – an approximate 50% reduction in residential units,

D) Increased Density – "build-out of all remaining Snowcreek Master Plan units.[4] For further discussion of these alternatives, see Section VI of this Draft EIR. Based on the analysis in Section VI, Alternative C (Reduced Density) was selected as the environmentally superior alternative.

F. SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table I-1 summarizes the various environmental impacts associated with the Project; includes the mitigation measures recommended to reduce or avoid the environmental impacts; and identifies the level of impact significance after mitigation.

[4] *The density bonus of 36.625 units would not apply to the Project and instead would remain with the Snowcreek Athletic Club property. Alternative D has been prepared to show the impacts of the Project without the density bonus.*

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Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
AESTHETICS (AES)		
Impact AES-1a Consistency with Policies (1987 General Plan)		
Several policies in the General Plan are applicable to the Project with respect to visual resources. The Project would be generally consistent with most of the applicable policies associated with aesthetics in the 1987 General Plan with respect to the identified viewpoints. However, the Hotel element of the Project would not be consistent with 1987 General Plan policies pertaining to scenic vistas because it would alter the visual character of the site, which would be apparent to viewers looking toward the Sherwin Range from public areas near the Project site. The Hotel element of the Project would also be inconsistent with the height limitation contained in the Town's Zoning Code unless the Town Council approves the requested Zone Code Amendment. Therefore, development of the Project would create an impact for which there are no mitigation measures available and this impact would be considered significant and unavoidable.	No mitigation measures are available.	Significant and Unavoidable
Impact AES-1b Consistency with Policies (2007 General Plan)		
The 2007 General Plan sets forth policies and implementation measures to ensure the preservation of the visual resources and visual character of the Town of Mammoth Lakes. A consistency analysis of the Project with applicable policies contained within the proposed General Plan was prepared. While the 2007 General Plan does not explicitly prohibit a 120-foot Hotel, the Town's Municipal Code does. Whether the Town decides to amend the zoning code and allow the Hotel to have increased height or not, the Project would create an impact for which there are no mitigation measures available and this impact would be significant and unavoidable.	No mitigation measures are available.	Significant and Unavoidable

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact AES-2 Public Views and Scenic Vistas		
A total of 6 views depicting before and after the Project is constructed were prepared. The locations from which the views were taken are as follows: View 1: Old Mammoth Road and Minaret Road Looking South View 2: Old Mammoth Road and Sherwin Creek Road Looking South View 3: Minaret Road Looking South View 4: Sherwin Creek Road Looking West View 5: U.S. Forest Service Lands to the West of Sherwin Creek Road View 6: Panorama Dome Trail Looking East The Project would not obscure views of the Sherwin Range from Views 2 and 3. Views of the Sherwin Range from Views 1, 4, 5, and 6 would be slightly obscured. However, the Project would result in substantial changes to visual character on the Project site within the viewshed, resulting in impacts to views. No mitigation measures are available to fully mitigate such impacts. Therefore, impacts to views would be significant and unavoidable.	No mitigation measures are available.	Significant and Unavoidable
Impact AES-3 Scenic Resources within a State Scenic Highway		
In the vicinity of the Town of Mammoth Lakes, State Highway 203 (Main Street) is an eligible State Scenic Highway (not officially designated) and U.S. Highway 395 is an officially designated State Scenic Highway. Impacts to scenic resources observable from a State Scenic Highway would be less than significant with the development of the Project.	No mitigation measures are required.	Less Than Significant
Impact AES-4 Visual Character and Design		
The Project would be designed to complement the existing alpine architectural character of nearby development and elsewhere within the Town of Mammoth Lakes. The Town would review all final building designs to ensure that the	No mitigation measures are available.	Significant and Unavoidable

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Project would be responsive to, and expressive of, its unique alpine setting. However, the Project would represent a substantial change in the visual character of the Project site by constructing housing and resort uses on a formerly undeveloped meadow. This change in character would be significant. The Town Code already requires the Project to undergo design review which will review the location of buildings, bulk and massing, materials and colors with the goal of furthering general plan policies and reducing the aesthetic impacts of the Project. There are no mitigation measures available that would reduce this impact; therefore this impact is significant and unavoidable.		
Impact AES-5 Signage	***Mitigation Measure AES-5***	
The Project would provide signage that is designed to be clear, understandable and attractive to both the vehicular and pedestrian viewer. The signage would reflect the mountain retreat community character of the Project with regard to materials, form and use. Signage would inform and direct, but in a manner and style which is intended to create a memorable impression and show a connection to nature, architecture and the historic past. Signage would link together the entire resort, clubs, and residential components, and cultivate an inclusive relationship throughout the Project site. Compliance with Mitigation Measure AES-5 would ensure that impacts related to signage would be less than significant.	Prior to the issuance of building permits, all buildings containing three or more separate businesses shall prepare a Master Sign Plan, in accordance with the Mammoth Lakes Municipal Code Chapter 17.34 and 17.40.	Less Than Significant
Impact AES-6 Light and Glare	***Mitigation Measure AES-6***	
Although the Project would be required to implement and be consistent with all Town ordinances related to outdoor lighting, the introduction of light and glare on a formerly undeveloped meadow would create a new source of light or glare that would be noticeable and would expand the existing lit footprint of the Town. Project lighting would alter nighttime views from Views 1, 2, 4, 5, and 6. This would be a significant impact. Although compliance with Mitigation	Prior to occupancy, all lighting on the Project site shall comply with the applicable requirements of the Town of Mammoth Lakes Outdoor Lighting Ordinance, in accordance with Mammoth Lakes Municipal Code Chapter 17.34.	Significant and Unavoidable

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Measure AES-6 is required, such compliance would not reduce this impact to a less than significant level. Therefore, this impact would be significant and unavoidable.		
Impact AES-8 Cumulative Impacts		
There are 41 related projects in the vicinity of the Project. Related projects that are close enough to the Project site have a direct cumulative visual quality impact in combination with the Project. These related projects are located along Old Mammoth Road in the vicinity of the Project site. As described in this section, the Project, although consistent in character with surrounding development, would result in significant impacts to the visual character of the Project site and views of the Sherwin Range. Each of the related projects proposed for the Project vicinity would be required to conform to Town development regulations and be reviewed against Town design guidelines prior to final approval. However, development of the Project in association with these related projects would result in a gradual infill of existing development in this sector of the Town, which would result in changes in visual character in the area. Therefore, the Project combined with the related projects would result in a cumulative impact to views and the visual character of the Town. As a result, cumulative impacts with respect to scenic views and existing visual character would be considered significant and the Project's incremental contribution to cumulative impacts would be significant.	No mitigation measures are available.	Significant and Unavoidable
AIR QUALITY (AQ)		
Impact AQ-1 Construction Impacts	***Mitigation Measure AQ-1***	
Foreseeable construction activities for the Project would include site preparation, grading, placement of utilities and other infrastructure, placement of foundations for structures, removal of existing structures, and fabrication of	The Project applicant shall require that the following practices be implemented by including them in the contractor construction documents to reduce the emissions of pollutants generated by heavy-duty diesel-powered equipment operating at the Project site	Significant and Unavoidable

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
structures across the entire approximately 237-acre Project area. The Project has been organized so that it could be developed in several phases, with the golf course expansion and Hotel construction occurring in the first phases and various residential components being progressively constructed at a pace dictated by market conditions. Each phase would operate successfully as a complete entity throughout the entire development. All staging would occur within the Project boundaries. Most construction phases would last approximately 18 to 24 months but some may be as long as 24 to 30 months. Some phases may be under construction simultaneously. Construction activities are proposed to be complete in 2017. Due to the construction time frame and the normal day-to-day variability in construction activities, it is difficult to precisely quantify the daily emissions associated with each phase of the proposed construction activities. Nonetheless, daily emissions that are estimated to occur on peak construction days was established. However, the Great Valley Basin Unified Air Pollution Control District does not currently have thresholds for determining the level of significance for air emissions. In the absence of such thresholds, any emissions that may result in a violation of an air quality standard or contribute substantially to an existing air quality violation will be considered significant. Since respirable particulate matter (PM_{10}) is classified as non-attainment, any PM_{10} emissions will contribute substantially to an existing air quality violation. Therefore, unless PM_{10} emissions are reduced by implementation of feasible control measures, impacts caused by these emissions would be considered significant. Even with implementation of the recommended mitigation measures outlined, development of the Project would continue to result in the generation of pollutant emissions. In addition, PM_{10} emissions cannot be reduced to zero with the implementation of the recommended mitigation measures. Therefore, the Project would continue to result in a significant and unavoidable impact with regard to PM_{10} emissions.	throughout the Project construction phases: a. Water all construction areas at least twice daily; water trucks will be filled locally after the contractor makes water acquisition agreements and obtains any required permits. b. Cover all trucks hauling soil, sand, and other loose materials; c. Apply clean gravel, water, or non-toxic soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites; d. Remove excess soils from paved access roads, parking areas and staging areas at construction sites; e. Sweep streets daily (with mechanical sweepers) if visible soil material is carried onto adjacent public streets; f. Hydroseed or apply non-toxic soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more); g. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.); h. Limit traffic speeds on unpaved roads to 15 miles per hour; i. Install gravel-bags, cobble entries, or other Best Management Practices (BMPs) and erosion control measures to prevent silt runoff to public roadways; j. Replant vegetation in disturbed areas as soon as possible; k. Install wheel washers for all exiting trucks or wash off the tires or tracks of all trucks and equipment leaving the construction site; l. Suspend excavation and grading activities when wind (as instantaneous gusts) exceeds 50 miles per hour (mph) and when sustained winds exceed 25 mph increase the frequency of watering from twice daily, as described in Mitigation Measure AQ-1a above, to three to four times a day; m. The construction fleet will meet the terms set forth in the CARB Proposed	

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	Regulation for in-use Off Road Diesel Vehicles, paragraph (d)(3) Idling. The proposed regulation implementation date is May 1, 2008. n. Limit the hours of operation of heavy duty equipment and/or the amount of equipment in use; o. All equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications; p. When feasible, alternative fueled or electrical construction equipment shall be used for the Project site; q. Use the minimum practical engine size for construction equipment; r. Gasoline-powered equipment shall be equipped with catalytic converters, where feasible; and	
Impact AQ-2 Operational Emissions	***Mitigation Measure AQ-2***	
According to the Air Quality Management Plan, particulate matter that causes PM_{10} violations consists primarily of road dust and soot from wood combustion. In other words, tailpipe emissions from heavy-duty diesel engines constitute a minor or negligible component of PM_{10} impacts in the Mammoth Lakes area. An analysis of daily operational emissions has been prepared utilizing the URBEMIS 2002 computer model. As discussed previously, the Project would be divided into four phases. The operational emissions from Phase I and the construction emissions from Phase II have been combined. As CO, NOx, ROC, and SOx are classified as in attainment, the emissions of these pollutants would constitute less-than-significant impacts. The total PM_{10} emissions anticipated as a result of the Project at its completion is 422,193 grams per day. As a result, particulate emissions generated by wood combustion from the Project would not contribute to Federal and State PM_{10} violations. Since the AQMP thresholds of 106,600 Vehicles Miles Traveled (VMT) per day and one EPA II solid-fuel burning appliances per residential unit are only meant to address cumulative	The Project applicant shall require the following implementation measures to reduce PM_{10} operational emissions resulting from the Project to a less than significant level: a. The Project shall include a transportation demand management program to reduce overall vehicle miles traveled (VMTs), in order to demonstrate compliance with the Federal PM_{10} standard of 150 micrograms per cubic meter (µg/m.3) The program shall include, but not be limited to, circulation system improvements, shuttles to and from parking areas, and the location of facilities to encourage pedestrian circulation. b. The Project shall be linked to existing developed areas through existing road networks, public transit systems, open space systems, and bicycle and pedestrian systems. c. The Project shall implement trip reduction measures particularly during PM peak traffic hours to disperse trips between parking areas and mountain portals to and from the ski area.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
impacts, operational impacts from PM_{10} emissions will be addressed in the cumulative impacts section below.	d. Residential condominium units shall enter into a transit fee agreement with the Town consistent with the Town's established Transit Fee Agreement Program. e. No solid fuel burning appliances shall be permitted within residential units within multi-family residential developments.	
Impact AQ-3 Local CO Concentrations		
Traffic-congested roadways and intersections have the potential to generate localized high levels of carbon monoxide (CO). By generating additional traffic, the Project could potentially cause exceedances of the 1-hour or 8-hour Federal or State CO standards. Based on the CALINE4 computer-modeling results, local CO concentrations would not exceed state or national ambient air quality standards. Therefore, emissions of CO associated with the Project would result in a less-than-significant CO air quality impact.	No mitigation measures are required.	Less Than Significant
Impact AQ-4 Greenhouse Gas Emissions		
Parts of the Earth's atmosphere act as an insulating blanket of just the right thickness, trapping sufficient solar energy to keep the global average temperature in a suitable range. The blanket is a collection of atmospheric gases called greenhouse gases (GHG) based on the idea that the gases also trap heat like the glass walls of a greenhouse. the Project complies with all feasible and applicable measures to bring California to the emission reduction targets. However, as no thresholds of significance pertaining to GHG emissions have been adopted by the Town or established by the State, no determination on the significance of this impact has been made.	No mitigation measures apply.	No determination on the significance of this impact has been made.

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact AQ-5 Odors		
Construction activities could generate airborne odors associated with the operation of construction vehicles (e.g., diesel exhaust) and the application of architectural coatings. However, these emissions would occur during daytime hours only for limited periods and would be restricted to the immediate vicinity of the construction site and activity. The wind would also tend to disperse odors, and such activities would not affect a substantial number of people and would result in a less than significant impact.	No mitigation measures are required.	Less Than Significant
Impact AQ-5 Cumulative Impacts	***Mitigation Measure AQ-5***	
The Great Basin Unified Air Pollution Control District (GBUAPCD or District) does not have numerical thresholds to determine whether the Project would result in a cumulatively considerable net increase of PM_{10} or 0_3 precursors. However, as discussed above, 0_3 impacts are primarily the result of pollution generated in the San Joaquin Valley. Thus, the cumulative increase of 0_3 precursor emissions as a result of construction and operation of the proposed and related projects would not substantially contribute to the exceedances of the State 0_3 standard and, thus, would not be cumulatively considerable. According to the Town's General Plan Update EIR, the increases in PM_{10} emissions associated with both construction and operation of the proposed and related projects would be considered cumulatively considerable even without development of the Project. Since the Project's construction impact with regard to PM_{10} emissions would remain significant and unavoidable, the Project's cumulative construction impact on air quality would also be considered significant and unavoidable. The Project is consistent with the AQMP for the Town of Mammoth Lakes. Therefore, cumulative operational impacts for the Project would be less than significant.	No mitigation measures are required for cumulative operational impacts as cumulative operational impacts were determined to be less than significant. No mitigation measures are available for cumulative construction impacts for PM_{10} emissions.	Significant and Unavoidable

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
BIOLOGICAL RESOURCES (BIO)		
Impact BIO-1a Special Status Species	***Mitigation Measures BIO-1a through 1g***	
Plants Thirty-five special-status plants were evaluated for their potential for occurrence in the study area, ten of which were determined to have "medium" or "high" potential for occurrence. Implementation of mitigation measures recommended under "Impact BIO-2: Sensitive Natural Communities" would also ensure that special-status plants species potentially occurring within the open space would not be inadvertently impacted. The one remaining special-status plant species (Masonic rock cress) could be significantly impacted by the Project. Project construction would result in the removal of the majority, if not all, of the basin sagebrush present in the development area. This could result in potentially significant impacts to Masonic rock cress, if present. Implementation of Mitigation Measure BIO-1a would reduce potential impacts to these species to a less-than-significant level. **Animals** Of the 33 special-status animal species evaluated for potential occurrence in the study area, six were determined to have "medium" or "high" potential for occurrence. Impacts of the Project on each of these animal species are addressed below. **Amphibians and Reptiles** Project construction could result in potentially significant impacts to the Yosemite toad. If present, construction-related activities would result in temporary and permanent habitat loss and could potentially result in direct mortality, injury, or harassment of toads, especially during the time of year when toads are moving to and dispersing from aquatic habitats, and decreased water and habitat quality. Implementation of Mitigation Measure BIO-1b	**Mitigation Measure BIO-1a** To determine presence or absence of Masonic rock cress in the development area, a qualified biologist shall conduct focused surveys according to CDFG guidelines, for this species prior to the onset of construction activities. The surveys shall be conducted at the proper time of year when this plant is both evident and identifiable. A qualified biologist is an individual who possesses the following qualifications: 1) experience conducting floristic field surveys; 2) knowledge of plant taxonomy and plant community ecology; 3) familiarity with the plants of the area, including rare, threatened, and endangered species; 4) familiarity with the appropriate state and federal statutes related to plants and plant collecting; and 5) experience with analyzing impacts of development on native plant species communities. If Masonic rock cress is not found in the development area, no further mitigation would be required. However, if this plant species is located, the survey will determine the number of individuals present and the limits of the area occupied by the population, and one of the following additional mitigation measures shall be implemented: (a) avoidance and permanent protection of the onsite population; (b) permanent preservation of an existing, offsite population of the species in the region at a 2:1 acreage ratio; or (c) transplant the individuals to permanently preserved habitat on- or off-site at a 1:1 acreage ratio. If transplanted offsite, the location should preferably be adjacent to the site or in close proximity. Each additional mitigation option above (a – c) shall include the preparation of a Preservation Plan (under a or b) or a Mitigation Plan (under c) by a qualified biologist to be submitted to and approved by the Town. The Preservation or Mitigation Plan shall include the location and extent of the preserved or transplanted individuals and measures	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
would reduce impacts resulting from the Project to Yosemite toad to a less-than-significant level. **Birds** The willow-alder riparian corridor along Mammoth Creek provides potential breeding and nesting habitat for willow flycatchers. The nesting season is a critical period for the maintenance of bird populations and disturbance activities that cause birds to abandon an active nest or direct nest upset are considered a potentially significant impact. Implementation of Mitigation Measure BIO-1c, scheduling construction activities outside the 3 to 4 month breeding season (June 1st through September 15th) or, if not feasible, conducting protocol-level surveys, would reduce construction-related impacts to breeding and nesting willow flycatchers to less than significant. The Mammoth Creek riparian corridor, as well as the other vegetation communities in the study area, also supports potential breeding and nesting habitat for other migratory birds (e.g., yellow warbler) and raptors (e.g., red-tailed hawk, sharp-shinned hawk). Construction activities, such as vegetation clearing and grubbing and grading, could have significant impacts on breeding birds by destroying nests and nesting habitat and/or causing nest abandonment. Implementation of Mitigation Measure BIO-1d would reduce potentially significant impacts to other breeding and nesting migratory birds and raptors to a less-than-significant level. Following construction, breeding and nesting migratory birds, including the willow flycatcher, and raptors could be directly and/or indirectly impacted by increased human-related disturbances indirectly caused by the Project. Implementation of Mitigation Measure BIO-1e, which includes good wildlife management practices, would reduce potentially significant post construction impacts to a less-than-significant level.	to ensure protection of the population during and following Project implementation (in perpetuity), including a mechanism to ensure permanent preservation of the population from development such as a conservation easement. The Plan shall also include methods to transplant the individuals (if applicable), measures to maintain the population (i.e., weed control), and methods to monitor the population for a minimum of five years following preservation or transplantation, including performance criteria and contingency measures in case of failure to meet the established performance criteria. **Mitigation Measure BIO-1b** To avoid substantial adverse affects to Yosemite toad, a qualified biologist shall conduct surveys following standard visual encounter techniques supplemented with dipnetting surveys to confirm presence or absence of toads in the study area. At minimum, the biologist shall be familiar with the distinguishing physical characteristics of all life stages of the Yosemite toad and other amphibians found in the Sierra Nevada region of California. The biologist shall also hold all necessary federal, state, and local agency permits for surveying and handling this species. Because the actual timing of visual encounter and dipnetting surveys for Yosemite toad may vary depending primarily on the watershed characteristics, regional snow pact, timing and rate of spring runoff, day length, average ambient air and water temperatures, and local and seasonal weather conditions, the biologist shall visit nearby accessible occurrences of Yosemite toad (reference sites) to identify the breeding period in the vicinity of the Project site. The biologist shall then conduct at least one to two visual encounter surveys from May through July at the appropriate time of day to determine presence or absence of toads onsite. If during the initial breeding survey, no individual Yosemite toads or egg masses are encountered, subsequent surveys shall be conducted two to four weeks later. Approximately four to eight weeks after completing the breeding survey(s), dipnetting surveys for tadpoles shall be conducted (usually July through August). If no individual toads (e.g., adults or tadpoles) or egg masses are encountered, no further mitigation would be required. However, if Yosemite toad is encountered the following	

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Mammals Sierra Nevada Mountain Beaver and Mount Lyell Shrew Good wildlife management practices such as those outlined in Mitigation Measure BIO-1e would also reduce post-construction impacts to the Sierra Nevada Mountain Beaver and Mount Lyell shrew to less than significant. Western White-Tailed Jackrabbit The noise and vibrations from construction equipment associated with Project construction and other construction-related activities (e.g., increased human activities, foot and vehicle traffic) would likely create disturbance that should be sufficient to cause juvenile and adult hares occurring within the development area to move away from the construction area. This would be considered a significant impact. Implementation of Mitigation Measure BIO-1f, pre-construction surveys, would reduce impacts to white-tailed jackrabbits to a less-than-significant level. American Badger Vegetation communities east of the existing golf course and north of Old Mammoth Road provide potential habitat for the American badger. This would be a potentially significant impact. Implementation of Mitigation Measure BIO-1g, pre-construction surveys, would reduce the potential loss of active badger burrows and/or individual badgers to less than significant.	measures shall be implemented: • A qualified biologist shall develop and implement, in coordination with the USFWS, CDFG, and USFS, an exclusion and relocation program for Yosemite toads within the development area. The design and type of exclusion fencing, as well as the method and location of relocation shall be approved by the resource agencies prior to implementation. • Pre-construction surveys of aquatic habitats and adjacent terrestrial habitat shall be conducted in all work area by qualified biologist within two weeks of initiating work. Any observed toads shall be relocated according to procedures outlined in the exclusion and relocation program developed and implemented above. Active work areas shall be re-surveyed regularly between May and September. • During construction activities, all trash that may attract predators will be properly contained, removed from the work area, and disposed of regularly. Following Project construction, all trash and construction debris shall be removed from work areas. • Any fueling and maintenance of vehicles and other equipment and staging areas shall be at least 65 ft (20 m) from any willow-alder riparian community or waterbody. • Appropriate sediment and erosion control best management practices (BMPs) shall be implemented to protect the water quality of the Mammoth Creek and the several ponds near Mammoth Creek, as well as the golf course ponds and associated drainages. BMPs to be implemented shall be described in the Project site's stormwater pollution prevention plan (SWPPP) and shall be installed according to the manufacture's specifications. • Areas temporarily disturbed by construction activities shall be recontoured and revegetated. An appropriate assemblage of vegetation that is suitable for the area	

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	shall be used during restoration efforts. **Mitigation Measure BIO-1c** To avoid substantial adverse affects to nesting willow flycatchers, construction activities, including vegetation clearing and grubbing and grading, on the portion of the development area north of Old Mammoth Road shall be conducted outside of the nesting season (June 1st through September 15th). If this is not feasible, then a qualified biologist holding all necessary federal, state, and agency permits shall conduct protocol-level surveys for willow flycatchers following methods outlined in A Willow Flycatcher Survey Protocol for California to confirm presence or absence in the study area. A qualified biologist is an individual who has sufficient knowledge, training, and experience with bird identification and surveys to distinguish the willow flycatcher from other non-Empidonax species, and recognize the willow flycatcher's primary song. Also, it is strongly recommended that the biologist has attended a willow flycatcher survey training workshop. The protocol is based on the use of repeated tape-playback surveys during pre-determined periods of the breeding season: Survey Period 1: June 1st through June 14th; Survey Period 2; June 15th through June 25th; and Survey Period 3: June 26th through July 15th. It requires a minimum of two surveys on the site, one during Survey Period 2 and one during either Survey Period 1, or Survey Period 3 to document presence or absence of willow flycatchers during the survey year. In addition, successive surveys must be at least five days apart; surveys done fewer than 5 days apart are not considered to be in separate survey periods. If no willow flycatchers are detected in the study area, no further mitigation would be required. However, if willow flycatcher is detected, the CDFG shall be contacted for a final discussion on the possibility of doing construction-related activities during the breeding season. Also, in coordination with the CDFG, a long-term (i.e., greater than five year) monitoring program shall be developed and implemented in order to protect the existing population and provide baseline data to make well-informed, adaptable management plans, if needed in the future. Regardless of whether or not flycatchers are detected, the willow flycatcher survey forms (Form 1; Willow Flycatcher Field Survey	

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	Form, Form 2; Willow Flycatcher Survey Summary-Site Description, and Form 3: Willow Flycatcher Survey Summary-Results Summary) shall be submitted to the CDFG by October 1st of each year. **Mitigation Measure BIO-1d** To avoid substantial adverse affects to other nesting migratory birds and raptors, one of the following measures shall be implemented: • Conduct vegetation removal and other ground disturbance activities associated with Project construction during the non-breeding season (September 16th through March 14th); OR • Conduct pre-construction surveys for nesting birds if construction activities are to take place during the nesting season (March 15th through September 15th). Pre-construction surveys shall be conducted by a qualified biologist once per week for eight consecutive weeks at the appropriate time of day during the breeding season and shall end no more than three days prior to the onset of construction activities to confirm presence or absence of active nests in the Project vicinity (at least 300 feet around the development area). If active nests are encountered, species-specific measures shall be prepared by a qualified biologist, in coordination with the CDFG and other appropriate agencies, and implemented to prevent direct loss or abandonment of the active nest. At a minimum, construction activities in the vicinity of nest shall be deferred until the young have fledged and an exclusion buffer zone shall be established. A minimum exclusion buffer of 25 feet is typically recommended by CDFG for songbird nests, and 200 to 500 feet for raptor nests, depending on the species and location. The perimeter of the nest-setback zone shall be fenced or adequately demarcated with staked flagging at 20-foot intervals, and construction personnel restricted from the area. A survey report by the qualified biologist verifying that the young have fledged shall be submitted to the Town for review and concurrence prior to initiation of construction activities within the nest-set-back zone. The survey	

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	report shall also be submitted to the CDFG for review. **Mitigation Measure BIO-1e** The following good wildlife management practices shall be implemented to reduce impacts to nesting migratory birds and raptors, as well as other wildlife species, following Project development. • Domestic pets belonging to residents or visitors shall be prohibited from entering the adjacent undeveloped lands or open space areas. Signage shall be posted and maintained along the boundaries of the development area indicating such prohibitions and educating the community about domestic pets as a conservation threat to birds and other wildlife. • Signage shall be installed along the existing nature trails on the Project parcel north of Old Mammoth Road educating the community about the breeding season being a vital period in birds' and other animals' lives and disturbances during this time may result in nest or young abandonment. • Educational brochures shall be distributed to residents and visitors discussing the importance of not supplementing the diet of avian nest predators such as jays (Cyanocitta sp.), magpie (Pica sp.), ravens (Corvus corax), and brown-headed cowbird (Molothrus ater) by feeding them during the breeding season. Also, educational brochures shall instruct residents and visitors not to feed wildlife or allow wildlife access to trash. This could lead to increased natural mammalian predators such as raccoon, fox (Vulpes sp.), and opossum (Didelphis virginiana). These predators tend to benefit disproportionately from human habitation, and as their populations expand they are negatively affecting the health of bird and other animal populations. • Night lighting associated with the Project shall be designed to provide illumination of target areas with minimal offsite visibility to avoid potentially illuminating wildlife use areas located within and adjacent to the development area.	

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	Mitigation Measure BIO-1f To avoid substantial adverse affects to western white-tailed jackrabbit, one of the following measures shall be implemented: • Conduct vegetation removal and other ground disturbance activities associated with Project construction during the non-breeding season (August 1st through January 31st); OR • Conduct pre-construction surveys for western white-tailed jackrabbit if construction activities are to take place during the breeding season (February 1st through July 31st). Pre-construction surveys shall be conducted by a biologist familiar with this hares' habitat and sign (e.g., tracks, pellets) once per week for five consecutive weeks and shall end no more than three days prior to the onset of construction activities to confirm presence or absence of hares within the Project's development area. If hares or evidence of hare is encountered, the qualified biologist, in coordination with the CDFG, shall develop and implement site-specific measures (e.g., exclusion buffer zone, nesting monitoring) to avoid loss of nests or young. A survey report by the qualified biologist verifying the presence or absence of western white-tailed jackrabbit and describing measures developed and implemented to avoid hares, if determined present, shall be submitted to the Town for review and concurrence prior to initiation of construction activities. **Mitigation Measure BIO-1g** To avoid substantial adverse effects to badgers, a qualified wildlife biologist shall conduct an initial survey for active burrows at least 30 days prior to initiation of construction activities to confirm presence or absence of badger in the project vicinity (at least 150 feet around the development footprint). If no individual badgers or evidence of badger is found, no further mitigation would be required at this time. However, if badger is detected, site-specific measures (e.g., exclusion buffer zone, nesting monitoring) shall be prepared by a qualified biologist, in coordination with the CDFG and other agencies as	

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	appropriate, and implemented to prevent direct loss of active burrows and/or individuals. Regardless of whether badger is detected during the initial survey, a subsequent survey for badger in the Project vicinity shall be conducted no more than 3 days prior to the initiation of construction activities to confirm no new burrows have established in the intervening period. A survey report by the qualified biologist verifying that there are no active burrows present in the development footprint shall be submitted to the Town for review and concurrence prior to initiation of construction activities. The survey report shall also be submitted to the CDFG for review.	
Impact BIO-2 Sensitive Natural Communities	***Mitigation Measures BIO-2a through 2b***	
Riparian habitat is present in the study area along Mammoth Creek; however, the Project would not result in direct impacts (e.g., removal or damage) of this vegetation community, and would instead preserve this community, as well as the adjacent wet meadow, as open space. Implementation of Mitigation Measure BIO-2a would reduce this potential impact to less than significant. Development of the Project could also affect the riparian and wet meadow communities, as well as the other natural communities, present in the vicinity by indirectly introducing non-native plant species into these areas. The effects of this impact would be minimized by implementation of Mitigation Measure BIO-2b. Potential jurisdictional waters and wetlands are present in the study area, which are considered sensitive; however, these features are addressed under "Impact Bio-3: Jurisdictional Resources" below. While the other vegetation communities present in the study area are not considered sensitive, they contain some trees that meet the minimum size (six inches in diameter) to require approval from the Town prior to removal; impacts to these trees are addressed under "Impact Bio-5: Conformance with Town Policies and Ordinances" below.	**Mitigation Measure BIO-2a** To avoid potential inadvertent impacts to preserved sensitive habitats (riparian habitat, wet meadow, or other jurisdictional features) adjacent to the development area, the following measures shall be implemented prior to and during construction activities: • Prior to construction activities, the boundaries of sensitive habitats that will not be impacted shall be plotted on all construction plans and maps, including a minimum buffer of 10 feet or more as determined by a qualified biologist. • Silt fencing and construction fencing (or flagging to make the silt fencing more visible) shall be installed around the sensitive habitat and buffer, and the final location of the installed fencing shall be approved by a qualified biologist prior to initiation of construction activities. • Encroachment into the sensitive habitat and buffer shall be prohibited by construction personnel, and storage of materials or equipment shall be prohibited in this area. • Prior to the onset of construction activities, construction personnel shall be briefed on the location of sensitive habitat and other resources that shall be persevered and the importance of avoidance. • The silt fence shall be monitored regularly during construction activities to ensure	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	that the fencing remains intact and functional, and that no encroachment has occurred into the sensitive habitat or boundary; any repairs to the fence or encroachment correction shall be conducted immediately. A memo summarizing monitoring dates, observations, and repairs/corrections shall be prepared following each construction season and submitted to the Town. • Appropriate sediment and erosion control best management practices (BMPs) shall be implemented to protect water quality of Mammoth Creek and its adjacent wet meadow community during and following project construction. The BMPs to be implemented shall be described in the site's stormwater pollution prevention plan (SWPPP) and shall be installed according to the manufacturer's specifications. • All fueling and maintenance of vehicles and other equipment and staging areas shall be at least 50 ft (15 m) from sensitive habitats. • Mitigation Measure BIO-2b • To minimize establishment of invasive, non-native plant species on the site, the following measures shall be implemented. • A construction schedule shall be developed to closely coordinate activities such as clearing, grading, and reseeding, to ensure areas are not prematurely stripped of native vegetation and revegetation activities be conducted as soon as possible following development. • Vegetation disturbances shall be limited to those areas identified on construction plans and maps as slated for development or construction staging. • Native and compatible non-native plant species, especially drought resistant species, shall be used for revegetation. Refer to the list of Plants that Thrive in Eastern Sierra Gardens' prepared by Mono County. • Landscaping will not use invasive non-native plants that threaten wildlands according to the California Invasive Plant Inventory made available by the	

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	California Invasive Plant Council (Cal-IPC). • Erosion and sediment control materials shall be certified as weed-free.	
Impact BIO-3 Jurisdictional Resources	***Mitigation Measure BIO-3***	
Jurisdictional waters of the United States, including wetlands, and waters of the State, are present in Mammoth Creek, its tributaries, several open water ponds and in the adjacent wet meadow community in the study area north of Old Mammoth Road. Although no direct impacts would occur in these areas from the Project, as the area north of the development area would be preserved as open space, indirect impacts could occur from adjacent construction activities such as inadvertent damage from equipment or vehicle staging, or erosion. Implementation of Mitigation Measure BIO-2a above would reduce this potential impact to a less-than-significant level. The existing golf course ponds west of Fairway Drive and the drainages and ditches that connect them are not considered federally jurisdictional features; however, these areas may be considered waters of the State subject to regulation by the RWQCB, and may be considered lakes or streambeds subject to regulation by CDFG. However, similar to the other waters in the study area north of Old Mammoth Road, these features are not located within the Project's development area, and implementation of Mitigation Measure BIO-2a would reduce any potential indirect impacts resulting from construction activities to less than significant. The existing golf course pond, the northernmost retention basin, and the drainage/ditch connecting these features located south Old Mammoth Road and east of Fairway Drive are also potentially subject to regulation by the RWQCB and CDFG (but are not considered to be federally jurisdictional). The Project would result in reducing the stormwater retention of the existing golf course pond (i.e., lowering the spillway at the eastern end of the pond) and replacing the detention basin and drainage/ditch with a series of unlined stormwater	Prior to the onset of construction activities, including concrete and riprap removal associated with the reduction of the stormwater retention in the existing golf course pond, and vegetation clearing and grubbing and grading associated with the creation of the stormwater control basins and vegetative swale, a Waste Discharge Requirement (WDR) permit application shall be submitted to RWQCB and a Lake or Streambed Alteration Notification shall be submitted to CDFG for impacts to the existing golf course pond, the northernmost retention basin, and the drainage/ditch connecting these features. Mitigation measures associated with permits may include impact minimization measures such as implementation of best management practices (i.e., erosion and sediment control measures) and seasonal work restrictions, and possibly habitat compensation measures such as the restoration plantings in the vicinity. Impacts to potentially jurisdictional features shall not occur until the permits are received from the appropriate regulatory agencies, or correspondence is received from the agencies indicating that a permit is not required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
control basins and a vegetative swale (refer to Appendix G, Draft EIR Technical Appendices, Hydrology Data). Impacts to these features would be reduced to less than significant with implementation of Mitigation Measure BIO-3.		
Impact BIO-4 Wildlife movement, migration corridors, and native wildlife nurseries	***Mitigation Measure BIO-4a through 4c***	
Approximately 46 acres of the Sherwin holding area within the former federal parcel, which comprises the southern and eastern portions of the study area, south of Old Mammoth Road and east of Fairway Drive, would be lost as a result of the proposed golf course expansion. Furthermore, an additional approximately 49 acres of potential foraging and resting habitat south of Old Mammoth Road and east of Fairway Drive that may be used by deer in the adjacent holding area would be lost by Project construction. The loss of the holding area and additional foraging and resting habitat could be reduced to a less-than-significant level by implementation of Mitigation Measure BIO-4a. Construction-related activities (e.g., noise and vibration from construction equipment, increase human activity) could result in disturbance of individual mule deer currently using the holding area and the study area for foraging and resting, as well as individuals exiting the holding area along the Mammoth Rock migration route, located south of the Project site. Although these impacts would be temporary, as they would only occur during the construction period, implementation of Mitigation Measure BIO-4b, prohibiting major construction activities (e.g., vegetation clearing and grubbing and grading) until deer have completed spring and fall migration (generally from April 15 through June 1 and from October 1 through November 15), would reduce construction-related disturbance impacts to less than significant. Following construction, deer using the holding area and the Mammoth Rock Migration route could be directly and/or indirectly impacted by the operation of the residential, resort, recreational, retail, and public amenities components of	**Mitigation Measure BIO-4a** To offset the loss of holding area deer habitat, the applicant shall purchase or contribute funds to purchase a conservation easement on property(ies) that contain important lands in the winter range, migration corridor, and/or holding area of the Round Valley mule deer herd or any other migratory mule deer herd within the Mammoth Lakes vicinity as determined by the CDFG. The amount of acreage to be purchased or made part of a conservation easement ("replacement land") to offset the loss of mule deer habitat by this project shall be determined by the CDFG, and based upon the recommendation of a qualified biologist. The location and quantity of replacement land shall be based upon the acreage of deer habitat affected by the development and the comparative benefits or value to the mule deer herd of the habitat being removed by this project to the area being acquired or protected. Consequently, the CDFG shall not be required to utilize a simple removal to replacement ratio, but shall be permitted to consider other factors such as the quality and quantity of plant foraging material in the removal area and the replacement area and whether the replacement area land serves to protect important lands in the winter range, migration corridor and/or the holding area for the herd. In lieu of providing for replacement land, the CDFG may approve other means recommended by a qualified biologist by which the applicant shall protect or enhance habitat for the Round Valley mule deer herd or any other migrating mule deer herd within the Mammoth Lakes vicinity, such as erecting fencing along U.S. Highway 395 to protect the deer herd from vehicular traffic, providing monetary contributions toward the construction of a deer undercrossing along U.S. Highway 395, or other means to enhance the herd's habitat, or protect the herd, that is roughly proportional to the impact on the deer herd of the loss of	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
the Project. Implementation of Mitigation Measure BIO-4c would further reduce potential impacts to deer to a less-than-significant level. Mitigation Measure BIO-4c includes additional good wildlife management practices to those outlined in Mitigation Measure BIO-1e above. Measures are consistent with goals and policies in the Town's 1987 General Plan (e.g., 1987 General Plan – Wildlife Resources Goal 2 and Policy 4). The golf course vegetation and associated habitats could attract deer, leading to the request for depredation permits and/or construction of deer-proof fencing. Such request would be considered potentially significant impacts because they would result in direct take of deer and interfere with movement patterns, respectively. Implementation of good wildlife management practices outlined in Mitigation Measure BIO-4c would reduce these additional impacts to deer to less than significant. As discussed in more detail in the Wildlife Movement Corridors section, a small number of deer from the Round Valley herd may remain in the Mammoth area during the summer, and have been documented as using a fawning site southwest of the Project site. Given the distance between the Project site and fawning site, construction and operation of the Project is not likely to substantially affect use of this native wildlife nursery site, resulting in less-than-significant impacts.	deer herd habitat caused by the project (the "in lieu protection program"). The proposed land protection agreement or in lieu protection program shall be prepared by the applicant in close consultation with the Town, CDFG and directly affected parties (i.e., the seller(s) of the conservation easement or the recipients of the monetary contributions under the in lieu program). Prior to the onset of construction activities associated with the development of the new golf course, located on those portions of the site that have historically been deer habitat, the Town shall receive a signed copy of the land protection agreement, executed by all directly affected parties as defined above, or obtain written confirmation from CDFG of CDFG's approval of the in lieu protection program proposed by the applicant. Construction activities include vegetation clearing and grubbing and grading. In all events, implementation of the approved land protection agreement or in lieu protection program shall be commenced to the CDFG's satisfaction, prior to any grading of the approximately 46 acres of impacted deer habitat. Implementation shall be completed in stages, to the satisfaction of the CDFG, so as to ensure that the mitigation occurs within a sufficiently short period of time after the impact has occurred, in order to minimize any possibility of an unmitigated impact. The Town will reserve the option to delay the onset of construction activities in the event it determines that implementation of the proposed land protection agreement or in lieu protection program has been unduly delayed or obstructed by the applicant. **Mitigation Measure BIO-4b** Major construction activities (e.g., vegetation clearing and grubbing, and grading) within the development area south of Old Mammoth Road shall not occur when significant numbers of migrating deer are present in the Project vicinity (generally during the period from April 15 through June 1 and from October 1 through November 15) to avoid potential adverse impacts to the Round Valley mule deer herd using the Sherwin holding area and Mammoth Rock migration route during the spring and fall migration periods. Because the actual dates of construction will be based on deer arrival at and departure from the Project vicinity, which will depend on weather and snow conditions, a monitoring program shall be developed and implemented, in coordination with CDFG and	

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	other appropriate agencies, to determine the presence of deer in the area. All major construction activities shall be conducted during the interim periods between spring and fall migration periods only. **Mitigation Measure BIO-4c** In addition to the good wildlife management practices outlined in Mitigation Measure BIO-1e, the following habitat management practices shall be implemented: • No fences or other potential impediments to deer and other wildlife movement shall be installed along the outer edges of the Project site, particularly along the southern and eastern Project boundaries for deer. • No depredation permits for controlling deer shall be requested. The applicant recognizes that the development of lands within deer habitat contains associated risks of damage, which is acceptable. • Require management practices of landscapes treated with pesticides that minimize low-level exposures and sub-lethal effects to wildlife. Herbicides, pesticides, and fungicide application records and other landscape and turfgrass management records shall be made available to the Town or CDFG at any time upon request.	
Impact BIO-5 Conformance with Town Policies and Ordinances		
A total of 106 trees have been identified within the development area that meet the minimum size (six inches in diameter) to require approval from the Town prior to removal (Town of Mammoth Lakes Municipal Code, Chapter 17.16.050). Because all the native trees over six inches are intended to be retained and any proposed for removal following the arborist's review would be subject to approval from the Town prior to their removal, the Project would have no impact on trees regulated by the Town. As discussed above in Impact BIO-2 Sensitive Natural Communities, indirect, unanticipated impacts to waters and wet meadow habitat could occur during	No additional mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
construction activities within the development area in the adjacent basin sagebrush habitat north of Old Mammoth Road, such as inadvertent damage from equipment or vehicle staging, or erosion. Such impacts would conflict with goals and policies in the Town's 1987 General Plan, specifically Natural Vegetative Resources Policy 3 and Habitat. However, implementation of Mitigation Measure BIO-2b, requiring fencing, monitoring, and other best management practices, would reduce these impacts to less than significant. The Project could also result in increased wildlife and human interactions, particularly along the southern and eastern Project boundaries where deer and other wildlife may reside. Incidental human contact and intrusion impacts would conflict with the goals and policies in the Town's 1987 General Plan, specifically Wildlife Resources Policy 3. However, implementation of Mitigation Measure Bio-1e and Mitigation Measure Bio-4c, which includes good wildlife habitat management practices such as lighting and fencing restrictions, and domestic pet control, would reduce these impacts to a less-than-significant level.		
Impact BIO-6 Conformance with Adopted Habitat Conservation Plans, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan		
No Habitat Conservation Plans, Natural Community Conservation Plans or other local or regional plans have been adopted within the Town's UGB which encompasses the Project site, therefore, no impacts are anticipated and no mitigation would be considered necessary.	No mitigation measures are required.	Less Than Significant
Impact BIO-7 Cumulative Impacts		
Special-Status Species The measures prescribed to mitigation such impacts under the Project, and given the small size of the related projects and/or the location in existing developed	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
areas, these impacts are not anticipated to be cumulatively considerable when evaluated with other related projects in the vicinity. Sensitive Natural Communities Because of the Project's design and prescribed mitigation measures, the potential addition of related projects impacts to the Project's sensitive natural communities' impacts are not anticipated to be cumulatively considerable. Migratory Deer The deer holding area plays such an integral role in affecting productivity of the deer herd, removal of this habitat from the proposed project is considered potentially significant. When impacts to migratory deer from the proposed project's are considered collectively with related projects in the vicinity, these impacts may be cumulatively considerable, as they may result in an overall disturbance to mule deer migration along the Mammoth Rock corridor. Given the small size of the related projects (especially relative to the proposed Project) and/or the location of most of the related projects in existing developed areas, this impact to deer migration holding area is not considered cumulatively significant. The Round Valley herd once utilized the entire Mammoth Lakes basin for its holding area and migration corridor, but it has since been pushed further east and south due to development within the Town of Mammoth Lakes over the past century. However, the implementation of Project mitigation measures, including the proposed land protection agreement or in lieu protection program, restrictions on the construction season, and implementation of good wildlife management practices, the impacts to migratory deer holding area from the Project and past projects is not expected to be cumulatively considerable. Inyo National Forest – Recreational Impacts to Biological Resources However, with the measures proposed to mitigate impacts under the Project, and given the small size of the related projects as compared to the Project, these		

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
impacts are not anticipated to be cumulatively considerable or significantly adverse when evaluated with other related projects in the vicinity. The anticipated population increase may have significant impacts upon special-status species within the adjacent Inyo National Forest. Impacts to natural resources within the Inyo National Forest from recreational use are expected to increase due to the Town's cumulative population increase from the project and other regional residential projects, and these impacts may be considered cumulatively considerable or significantly adverse; however, identification and quantification of such impacts would be speculative under the current analysis. Much of the recreational Forest uses from the cumulative population growth in the area will revolve around these increasingly popular outdoor activities. Compliance with the Town's 2007 General Plan, requiring the Town to work closely with agencies, including the Inyo National Forest, to ensure that the regional natural ecosystem is maintained, will not result in cumulatively considerable impacts to sensitive natural resources in the Inyo National Forest from increased population and recreation.		
CULTURAL RESOURCES (CULT)		
Impact CULT-1 Impacts to Known Cultural Resources	***Mitigation Measure CULT-1***	
As discussed in the "Environmental Setting" above, the Project site and immediate vicinity have been subjected to multiple cultural resources studies. Two known resources, CA-MNO-3, which includes remnants of the "Old Mammoth" townsite, and CA-MNO-893H, the Bodle Ditch, are located within the Project site. Following is a discussion of the Project's impacts with respect to these known previously recorded cultural resources. CA-MNO-3: The Project has the potential to impact CA-MNO-3 south of Old Mammoth Road. Because the site was capped with non-cultural fill, it is	For the portion of CA-MNO-3 located north of Old Mammoth Road the applicant shall implement any of the following measures to reduce the significant impact to a less than significant level: • plan construction to avoid the site, • deed conservation easements, • cap the site prior to construction, or • perform archaeological data recovery.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
unlikely that the minor, Project-related changes to the golf course at the ground surface will impact the site. As such, any project-related impacts associated with alterations to the golf course to Site CA-MNO-3 would be considered less than significant under CEQA. The Project has the potential to impact the significant prehistoric and historic components of CA-MNO-3 north of Old Mammoth Road. The portion of this site that includes the "Old Mammoth" townsite is also considered significant because it meets criterion 1 and 4 of the California Register criteria for its association with events important to regional history. Therefore, Project-related impacts to Site CA-MNO-3 in this area would be considered potentially significant under CEQA. As such, mitigation measures are recommended below that would reduce any such impacts to cultural resources to a less-than-significant level.		
Impact CULT-2 Impacts to Unknown Cultural Resources	***Mitigation Measures CULT-2a through 2f***	
Portions of the Project site north of Old Mammoth Road are sensitive for prehistoric and historic archaeological resources, and human remains. Buried (previously unrecorded) prehistoric and historic archaeological deposits may be present within the Project site. In addition, previously unidentified features and/or diagnostic artifacts within previously recorded sites may be present within the Project site. Ground-disturbing construction associated with the Project has the potential to result in significant impacts to unknown cultural resources. As such, mitigation measures are recommended below that would reduce any such impacts to unknown cultural resources to a less-than-significant level.	**Mitigation Measure CULT-2a** A Mitigation Monitoring and Reporting Plan (MMRP) shall be prepared by a qualified archaeologist prior to Project construction for the portion of the Project site north of Old Mammoth Road. The MMRP shall outline the protocol for notification, temporary protection, documentation, and evaluation of previously unrecorded cultural resources encountered during construction, as well as mitigation of project-related impacts to any such resources that are considered significant under CEQA, and the curation of any artifacts or samples collected in the field. The MMRP shall include a sample data recovery plan and a curation agreement. This document shall be completed prior to commencement of any ground-disturbing activity associated with the Project site (including clearing, brushing, grubbing, vegetation removal, disking, grading, trenching, excavation, and/or boring). **Mitigation Measure CULT-2b**	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	A qualified archaeologist shall monitor all ground-disturbing construction in native soils for the portion of the Project site north of Old Mammoth Road. (Construction work within stockpile material does not require monitoring.) The construction monitor shall be supplied with maps and site records for the previously recorded cultural resources within the Project site, so that she/he can distinguish new resources from those that have been previously recorded and evaluated. The monitor shall prepare a daily monitoring log recording the type of work monitored, soil conditions, discoveries, and general observations. **Mitigation Measure CULT-2c** Previously unknown cultural resources identified during Project construction shall be protected through temporary redirection of work and possibly other methods such as fencing (to be outlined in the MMRP) until formally evaluated for significance under CEQA. In the event that previously unrecorded cultural resources are exposed during construction, the monitor shall be empowered to temporarily halt construction in the immediate vicinity of the discovery while it is documented and evaluated for significance. Construction activities may continue in other areas. If the discovery is evaluated as significant under CEQA, additional work such as data recovery excavation may be warranted to mitigate project-related impacts to a less-than-significant level. **Mitigation Measure CULT-2d** Procedures of conduct following the discovery of human remains have been mandated by Health and Safety Code §7050.5, Public Resources Code §5097.98 and the California Code of Regulations §15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Mono County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the NAHC within 24 hours, who will, in turn, notify the person the NAHC identifies as the most likely descendent	

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	(MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 24 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 24 hours, the owner shall, with appropriate dignity, re-intern the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC. **Mitigation Measure CULT-2e** A monitoring report shall be prepared upon completion of construction monitoring, summarizing the results of the monitoring effort. Site records for any newly recorded or updated cultural resources shall be appended to the monitoring report. **Mitigation Measure CULT-2f** Artifacts or samples collected during the course of construction monitoring and any testing or data recovery associated with newly discovered resources shall be curated in perpetuity in an appropriate facility upon completion of analysis and processing. □	
Impact CULT-3 Cumulative Impacts		
Implementation of the Project in combination with the related projects would result in the development of additional low- to high-density residential, commercial, institutional, public resort, and industrial land uses. Impacts to cultural resources (including historic, archaeological, and paleontological resources, as well as human remains) tend to be site-specific and are assessed on a site-by-site basis. The extent of the cultural resources (if any) that occur at the related project sites is generally unknown and, as such, it is not known whether any of the related projects would result in significant impacts to cultural resources. However, similar to the Project, such determinations would be made on a case-by-case basis and, if necessary, the applicants of the related projects would be required to implement the appropriate mitigation measures.	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Furthermore, the analysis of the Project's impacts to cultural resources concluded that, through the implementation of the mitigation measures recommended above, project-related impacts to cultural resources would be less than significant. Therefore, the Project would not contribute to any potential cumulative impacts, and cumulative impacts to cultural resources would be less than significant and no mitigation measures are required.		
GEOLOGY & SOILS (GEO)		
Impact GEO-1 Fault Rupture		
The Project site is not located within either Earthquake Fault Zones or Alquist-Priolo Hazard Zones and the potential for fault rupture is considered to be low. Therefore, Project impacts related to fault rupture would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact GEO-2 Strong Seismic Ground Shaking		
The Project site is located in a Seismic Zone 4 based on 1997 Uniform Building Code (UBC) and 2001 California Building Code (CBC). However, the Project applicant would be required to design and construct the Project in conformance to the most recently adopted CBC design parameters and the Town's Municipal Code for seismic design. Therefore, conformance with current UBC/CBC requirements, as well as the Town's seismic design requirements would reduce the potential for structures on the Project site to sustain damage during an earthquake event, and Project impacts related to ground shaking would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact GEO-3 Liquefaction and Soil Instabilities	***Mitigation Measures GEO-3a through 3c***	
Geotechnical investigation on the Project site indicates that: 1) up to seven feet of fine to coarse dense undocumented fill is present at a few locations, 2) topsoil/alluvial deposits consisting of loose sand and silty sand blanket the site between the depths of approximately 1-1/2 to 10 feet, and 3) perched water may develop at the site. Ground failures associated with soil liquefaction include post-liquefaction reconsolidation, lateral spreading, and loss of bearing support. Impacts would be significant. Undocumented fill and loose topsoil/alluvium are located on the Project site with approximate depth maximums of seven feet and ten feet below the grounds surface. Therefore, removal of these soils may cause a significant impact.	**Mitigation Measure GEO-3a Liquefaction and Soil Instabilities** Prior to issuance of building permits and grading activities, a design level geotechnical report shall be prepared and all recommendations in the report shall be adhered to. The design-level geotechnical report shall evaluate the potential for localized liquefaction by performing supplemental subsurface exploration (to evaluate the thickness, in place density, fines content of the underlying loose to medium soil and gradation), laboratory testing, and engineering analysis. **Mitigation Measure GEO-3b Liquefaction and Soil Instabilities** Implement all recommendations contained within these site-specific geotechnical reports, including those pertaining to site preparation, excavation, fill placement and compaction; foundations; concrete slabs-on-grade; pavement design; lateral earth pressures and resistance; and surface drainage control. **Mitigation Measure GEO-3c Liquefaction and Soil Instabilities** The final grading, drainage, and foundation plans and specifications shall be prepared and/or reviewed and approved by a Registered Geotechnical Engineer and Registered Engineering Geologist. In addition, upon completion of construction activities, the Project applicant shall provide a final statement indicating whether the work was performed in accordance with Project plans and specifications and with the recommendations of the Registered Geotechnical Engineer and Registered Engineering Geologist.	Less Than Significant
Impact GEO-4 Cyclic Densification		
Cyclic soil densification is a phenomenon in which non-saturated, cohesionless soil is densified by earthquake vibrations, resulting in ground surface settlement. Cyclic densification should be considered a potential minor hazard at the Project site. During a major earthquake on a nearby portion of one of the active faults,	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
strong ground shaking may cause the loose, unsaturated alluvial soil to densify and settle. It is estimated that up to ½ inch of cyclic densification may occur at the site. This may result in the minor surface improvements, such as minor cracking of foundations. ,Minor cracks in foundation and other minor surface improvements would not have the potential to represent a substantial risk to life and property. Furthermore, as noted, prior to issuance of building permits and grading activities, a design level geotechnical report shall be prepared and all recommendations in the report shall be adhered to. Therefore, cyclic densification does not represent a significant impact under CEQA. Impacts would be less than significant and no mitigation measures are required.		
Impact GEO-5 Landslides and Avalanches		
The potential for rock falls or snow avalanches to occur on the Project site is considered low because the site is not adjacent to the base of a steep slope or within close proximity to an area of avalanche flow. Furthermore, no evidence of past landslides has been observed. Therefore, Project impacts related to landslides and avalanches would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact GEO-6 Volcanic Activity	***Mitigation Measure GEO-6***	
A small to moderate volcanic eruption could occur somewhere along the Mono-Inyo Craters volcanic chain producing pyroclastic flows and surges as well as volcanic ash and pumice fallout that could significantly impact the Project site. Although this risk is present throughout the Town and surrounding areas, Project impacts related to volcanic activity would be significant.	The Project applicant shall prepare an emergency evacuation plan in consultation with the Town in order to provide for the orderly evacuation of the Project site in case the potential for volcanic hazards increases and residents need to vacate the Project site.	
Impact GEO-7 Carbon Monoxide		
As previously noted, high concentrations of carbon dioxide are located within isolated areas of the Town, prominently Horseshoe Lake. Carbon dioxide poses	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
a health risk when collected at high concentrations in lower parts of depressions and enclosures. However, once the carbon dioxide is able to disperse within the atmosphere, there is no longer a health risk. The Project site is located approximately two an half miles from the closest isolated area of high carbon dioxide concentrations, as such the carbon dioxide would disperse before arriving at the Project site. The Project site is not located in an area associated with high levels of carbon dioxide. Therefore, impacts would be less than significant and no mitigation measures are required.		
Impact GEO-8 Soil Erosion/Loss of Topsoil	***Mitigation Measure GEO-8***	
The Project site would require grading and earthwork and would be subject to soil erosion and loss of topsoil. Removal of unsuitable soils from all building locations shall extend below the unsuitable material and to a minimum horizontal distance of one-half the footing width or five feet (whichever is greater) horizontally outside the footing footprint. Furthermore, paved roadways and parking areas are recommended a removal of one to three feet. Additionally, erosion and loss of topsoil is possible surrounding the structures if left unprotected during the snowmelt season. Without proper implementation of erosion control measures during construction and operation of the Project, the site could sustain soil erosion and loss of topsoil. This would be considered a significant impact.	The following measures shall be implemented to prevent soil erosion and loss of topsoil: • A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared with the grading plans to fulfill regulatory requirements. • Permanent erosion control measures shall be placed on all graded slopes. No graded areas shall be left unstabilized between October 15th and April 15th. • Finish grading for all building areas shall allow for all drainage water from the building area to drain away from building foundations (two percent minimum grade on soil or sod for a distance of five feet). Ponding of water shall not be permitted.	Less Than Significant
Impact GEO-9 Expansive Soils		
Expansive soils contain clay minerals that attract and absorb water. The soils swell when subjected to moisture, causing structural problems through differential movement. As noted, the Project site consists of silty to clayey, very fine to coarse grained soils which are not considered expansive soils. Therefore, no expansive soils have been mapped or encountered in the Town. Therefore, Project impacts related to expansive soils would be less than significant and no	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
mitigation measures are required.		
Impact GEO-10 Septic Tanks or Alternative Waste Water Disposal Systems		
No septic tanks or alternative waster water disposal systems are proposed as part of the Project. Therefore, Project impacts related to soils incapable of supporting these uses would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact GEO-11 Cumulative Impacts		
Geotechnical impacts related to future development in the Town would involve hazards associated with site-specific soil conditions, including erosion, volcanic activity, and ground-shaking during earthquakes. The Project would incorporate Best Management Practices (including the preparation of a SWPPP) that would reduce or eliminate impacts from erosion. Although the Project would result in the addition of people to the Project area, the risk of seismic shaking would be no greater than other areas of the Town of Mammoth Lakes. The impacts on each site would be specific to that site and its users and would not be common or contribute to (or shared with, in an additive sense) the impacts on other sites. In addition, all development on the Project site would be subject to uniform site development and construction standards that are designed to protect public safety. Therefore, cumulative geology and soil impacts would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
HYDROLOGY & WATER QUALITY (HYD)		
Impact HYD-1 Water Quality Standards	***Mitigation Measure HYD-1***	
Construction Related Impacts The required implementation of the BMPs in the Project's SWPPP would ensure that Project construction activities within the Project site would not cause	The golf course expansion (Areas E2, E4, and F) area may be irrigated with reclaimed or potable water. At this time, mitigation requirements for the use of reclaimed water have not been determined. However, if reclaimed water is used for irrigation, options shall be explored to limit reclaimed water from entering the tributary area that flows toward	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
the violation of any water quality standards within Mammoth Creek. Thus, the Project would be considered to have a less than significant impact on the ability of Mammoth Creek to attain all applicable water quality standards. Operation-Related Impacts Activities associated with operation of the Project would generate substances that could degrade the quality of water runoff. Although the discharge of stormwater from the developed portions of the Project site to Mammoth Creek is expected to be an extremely rare event, implementation of Mitigation Measure HYD-1 below would reduce potential operational Project impacts on water quality in Mammoth Creek to a less than significant level.	Mammoth Creek. These measures could include: • Irrigate all retention basins and the swale from the retention basins (located to the west of Sherwin Creek Road) using potable water. • Irrigate any landscaping within or directly tributary to these features which requires irrigation using potable water. Golf course areas immediately south of the basins shall be constructed to retain all stormwater runoff and shall not overflow to the basins. • Increase capacity of on-site retention for the golf course areas irrigated with reclaimed water to include capacity for a storm of 100-year intensity. • Grade southeasterly limits of the golf course expansion area in some locations to block tributary drainage from the south and direct it east toward Sherwin Creek Road. At this stage, it is unknown if it will be required to limit reclaimed water from entering the tributary area that flows toward Mammoth Creek. The final determination of outflow conditions if reclaimed water is used will be made during the final design in coordination with the RWQCB and other applicable agencies. In the event that reclaimed water is used, the above mitigation measures will be implemented to avoid any impacts to the water quality of Mammoth Creek. In consultation with the Town, the Project applicant shall identify and implement a suite of stormwater quality BMPs designed to address the most likely sources of stormwater pollutants resulting from operation of the proposed development projects within the proposed Project area. Pollutant sources and pathways to be addressed by these BMPs include, but are not necessarily limited to, parking lots, maintenance areas, trash storage locations, rooftops, interior public and private roadways, the golf course, and storm drain inlets. These BMPs shall include detention and sedimentation basins as well as infiltration devices designed to filter runoff from paved areas on the Project site. The design and location of these BMPs will be subject to review and comment by the Town but shall generally adhere to the standards associated with the Phase II NPDES	

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	stormwater permit program. Implementation of these BMPs shall be assured by the Community Development Director and Town Engineer prior to the issuance of Grading or Building Permits. Compliance with these mitigation measures would reduce potential impacts resulting from Project operation on receiving water quality in Mammoth Creek to a less than significant level.	
Impact HYD-2 Groundwater Depletion or Recharge	***Mitigation Measure HYD-2***	
A significant impact may occur if a Project would substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Construction-Related Impacts Groundwater seepage was encountered at the Project site at depths as high as 2 feet and as low as 8.5 feet below the existing grade. Groundwater conditions often fluctuate seasonally and depths recorded may not necessarily be reflective of groundwater elevations during construction. Groundwater pumped during construction from the Project site would not be extensive and would be conveyed to one of the existing retention basins located within the existing golf course area. This amount of groundwater pumping would not be substantial enough to deplete or interfere with groundwater recharge and would be considered less than significant. Operation-Related Impacts The site is subject to high groundwater. Due to typical heavy snowpack melting in the spring, nearly all sites in Mammoth Lakes are subject to seasonal high groundwater and structures need to be protected from high groundwater levels. The proposed retention basins along Old Mammoth Road have been sized to retain and infiltrate runoff from the residential/commercial areas within the Project as well as runoff from other prior off-site developments which are	All underground structures shall be designed with exterior wall drain board to a footing drain system as well as underslab subdrains. Crawl spaces shall be protected with proper ventilation and subdrains. The system shall be designed such that subdrains shall be designed with outlet systems that have maximum water surface elevations lower than the bottom of the subdrains to ensure that subdrains would not be inundated with stormwater when retention basins reach capacity. Subdrain design shall be based on final Project design and shall be adequately sized so that retention basin capacity is maintained for stormwater retention purposes. Implementation of this measure would reduce this impact to a less than significant level.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
tributary to these basins. The direction of runoff from the increased impervious surface areas of the Project to these basins would provide for groundwater recharge and would reduce operation-related impacts concerning groundwater recharge to a less than significant level.		
Impact HYD-3 Drainage Pattern Alteration		
Construction-Related Impacts Development of the currently undeveloped areas within the Project site would result in the modification of existing drainage paths and a higher amount of surface runoff than is currently generated by these areas. The required implementation of the Best Management Practices (BMPs) in the Project's construction SWPPP would ensure that Project construction activities within the site would not cause substantial erosion or siltation on- or off-site. These BMPs would include, at a minimum, such measures as limiting site grading to dry spring, summer and fall months and siltation controls. Operation-Related Impacts Activities associated with the operation of the Project are not considered likely to substantially increase on- or off-site erosion or siltation. Nonetheless, the proposed installation of permanent storm control facilities and sedimentation/infiltration basins will reduce Project-generated erosion and siltation impacts (see Mitigation Measure HYD-1). No significant impacts pertaining to Project operation-generated erosion and siltation are anticipated to result from new development at the Project site. Thus, the Project would have a less than significant impact in terms of increasing on- or off-site erosion and siltation through the alteration of existing drainage patterns.	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact HYD-4 Drainage System Capacity	***Mitigation Measure HYD-4***	
The Project would create 43 acres of impervious surfaces consisting of roofs, drives, and parking areas. The Project would include 24 acres of landscaped areas. Compliance with the mitigation measure below would reduce potential impacts resulting from Project operation to a less than significant level.	In consultation with the Town of Mammoth Lakes and RWQCB, and subject to Town approval, the Project applicant shall identify and implement a suite of storm drainage facilities designed to safely capture, treat, and convey runoff from the required design storms. In addition, a detailed set of maintenance procedures necessary to assure that storm drainage facilities continue to work as designed shall be established and approved by the Town, in consultation with the RWQCB. Particular items requiring maintenance include, but are not limited to, cleaning of grates, removal of foreign materials from storm drainage pipes, maintenance as necessary for outlet facilities and retention basins, and repairs as necessary to damaged facilities.	Less Than Significant
Impact HYD-5 100 Year Flood Hazard		
A significant impact may occur if a Project would place structures which would impede or redirect flood waters in a 100-year flood zone. There is no 100-year flood zone south of Old Mammoth Road and west of Sherwin Creek Road. A small portion of the Project site north of Old Mammoth Road where the Market/General Store would be located is adjacent to Mammoth Creek and is within a 100-year flood zone. However, all development in this portion of the Project site would be placed outside the 100-year flood zone. Thus, the Project would have a less than significant impact with respect to flood hazards.	No mitigation measures are required.	Less Than Significant
Impact HYD-6 Cumulative Impacts		
Development of the Project in combination with the related projects would result in the further infilling of uses within the Urban Growth Boundary. The surrounding area primarily consists of a patchwork of undeveloped areas and developed impervious urbanized surfaces, and is served by existing storm drains that would be expanded in order to serve new development. It is likely that most of the related projects would drain to the Town's storm drain system and ultimately to Mammoth Creek. Each individual related project would be	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
required to submit a drainage analysis to the Town. Each drainage analysis must illustrate how peak flows generated from each related Project site would be accommodated by the Town's existing and/or proposed storm drainage facilities. Where necessary, each related project would be required to include detention or infiltration features designed to reduce the total rate and/or volume of runoff generated at its site. ll related projects that disturb one acre or more must also obtain coverage under the GCASWP, including the preparation and submittal of a SWPPP to govern all construction activities associated with each project. As a result, cumulatively considerable water quality and erosion/siltation impacts would be less than significant.		
LAND USE AND PLANNING (LU)		
Impact LU-1 Consistency with Applicable Land Use Plans, Policies, or Regulations		
As noted, the Project is generally consistent with and implements applicable plans and policies. The Project site is currently governed by the land use policies and regulations set forth in the General Plan (1987 and 2007 General Plan), the Snowcreek Master Plan (adopted in 1974 and amended in 1981) and the Town of Mammoth Lakes Zoning Ordinance. Due to consistency with virtually all of the 1987 and 2007 General Plan policies, impacts of the Project would be less than significant and would not require mitigation.	No mitigation measures are required.	Less Than Significant
Impact LU-2 Cumulative Impacts		
Cumulative land use impacts could occur if other related projects in the Town of Mammoth Lakes would result in land use impacts in conjunction with the Project. Of the 41 related projects, 34 are residential projects located within the Town. The Project, in conjunction with other projects, is located within an	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
urbanized area and would not be great enough in size or extent to divide an established community. The Project site and its vicinity are not located within an area covered by a Habitat Conservation Plan or Natural Community Conservation Plan and, therefore, would not contribute to any cumulative impacts to Habitat Conservation Plans. The Project is consistent with lot coverage as defined by the General Plan. Additionally, once the Zoning Code revisions are approved, the height of the proposed Hotel component of the Project would be consistent with height limitations as allowed in the Zoning Code. Each of these related projects would be required to demonstrate consistency with the goals, policies, and objectives of the General Plan, and other applicable regional plans and to determine whether they would result in environmental impacts. Therefore, the Project would not contribute to any cumulative land use impacts and this impact would be less than significant.		
NOISE		
Impact NOISE-1 Exposure of Persons to Excessive Noise Levels	***Mitigation Measures NOISE-1a through 1c***	
Construction Noise Construction of the Project would require the use of heavy equipment for site grading and excavation, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. During each stage of development, there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of the activity. Depending on the distance of nearby off-site uses to the Project site, implementation of Mitigation Measures NOISE-1a through NOISE-1c would ensure that noise levels are below the Town's maximum exterior noise standards for construction activity, resulting in a less than significant impact.	**Mitigation Measure NOISE-1a Exposure of Persons to Excessive Noise Levels** Construction activities shall be limited to between the hours of 7 A.M. and 8 P.M., Monday through Saturday. Work hours on Sundays and Town recognized holidays shall be limited to the hours between 9 A.M. and 5 P.M., and shall be permitted only with the approval of the building official or designee. **Mitigation Measure NOISE-1b Exposure of Persons to Excessive Noise Levels** Project developers shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels: • Provide advance notification of construction to the immediate surrounding land	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	uses around a development site • Ensure that construction equipment is properly muffled according to industry standards • Place noise-generating construction equipment and locate construction staging areas away from residences, where feasible • Schedule high noise-producing activities between the hours of 8 A.M. and 5 P.M. to minimize disruption on sensitive uses • Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, noise barriers or noise blankets **Mitigation Measure NOISE-1c Exposure of Persons to Excessive Noise Levels** Project developers shall require by contract specifications that construction staging areas within the Project site would be located as far away from vibration-sensitive sites as feasible.	
Impact NOISE-2 Excessive Construction-Related Groundborne Vibration		
Construction activities that would occur within the Project site would include grading and excavation which would have the potential to generate low levels of groundborne vibration. Vibration levels could reach as high as approximately 87 vibration decibels (VdB) within 25 feet of the Project site from the operation of large bulldozers. Construction of the Project would require the use of typical construction equipment that could generate some ground-borne vibration and ground-borne noise, but the Project would not involve the use of pile drivers, which have the potential to generate substantial vibration. In addition, per the Town's requirements, construction activities that would produce groundborne vibration would primarily occur between the hours of 7:00 AM and 8:00 PM Monday through Friday. Therefore, these activities would not occur during recognized sleep hours for residents. Based on this information, proposed construction activities associated with the Project would not expose sensitive	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
receptors in the Project vicinity to excessive groundborne vibration levels. Therefore, Project impacts related to excessive construction-related groundborne vibration would be considered less than significant and no mitigation measures would be required.		
Impact NOISE-3 Temporary Increase in Noise (Construction Noise)		
The uses nearest the Project site that are sensitive to construction noise are the single-family and multi-family residential uses adjacent to the Project site's southern and western boundaries. The property line of the nearest off-site, multi-family residential uses is located approximately 100 feet from the edge of the areas of construction within the Project site. This EIR assumes that an increase of five A-weighted decibel scale (dBA) or greater over ambient noise levels is substantial and significant. Therefore, demolition and construction activities associated with the Project, particularly the use of heavy machinery, could generate temporary intermittent noise in excess of the Town's noise standards. However, construction activities would only occur during the permitted hours designated in the Town's Municipal Code, and thus would not occur during recognized sleep hours for residences or on days that residents are most sensitive to exterior noise. In addition, construction activities would also be required to comply with the construction noise standards established in the Town Noise Ordinance. As such, although a physical increase in ambient noise levels would occur from the construction activities associated with the Project, this temporary increase would not create an adverse effect on nearby residents. Therefore, with compliance with the Town's Municipal Code and Noise Ordinance, the magnitude of this impact would be reduced to a less than significant level.	No mitigation measures are required.	Less Than Significant
Impact NOISE-4 Permanent Increases in Noise (Operational Impacts)		
Traffic Noise Levels On site	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Upon completion of the Project, noise levels within the Project site would be primarily generated by vehicular traffic on the surrounding roadways. The Town has established exterior noise standards for different land uses. As indicated in the Town Noise Ordinance, noise levels at each land use may not exceed the exterior noise standard plus 20 dBA for any period of time (maximum noise level). Based on the conceptual site plan for the Project showing the locations of the proposed residential uses relative to the surrounding roadways, none of the residential uses proposed in the Project site would be located within the 70 Ldn (community noise) contours of the roadways analyzed. Thus, the proposed residential uses within the Project site would not be exposed to traffic noise levels exceeding 70 Ldn. Thus, impacts associated with traffic noise levels on-site would be considered less than significant. Off-Site Traffic Noise The increase in traffic resulting from implementation of the Project would increase the ambient noise levels at sensitive off-site locations in the Project vicinity. Because traffic is considered to be a long-term noise source, a substantial permanent increase in ambient noise levels in the Project vicinity could potentially occur. a difference of three dBA between 24-hour noise levels is a barely-perceptible increase to most people. A five dBA increase is readily noticeable, and a difference of ten dBA would be perceived as a doubling of loudness. Because the increase in local noise levels along roadway segments resulting from implementation of the Project would not exceed the established thresholds of significance, this would not represent a substantial permanent increase in ambient noise levels. Therefore, this impact would be considered less than significant and no mitigation measures are required. On-Site Non-Vehicular Noise Upon completion of the proposed residential developments associated with the		

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Project, sources of noise that would be generated by operation of the new residential buildings would include new stationary sources such as ventilation and air conditioning (HVAC) systems. In addition, limited commercial development (75,000 square feet of commercial space) would also be developed. As such, the potential commercial developments would also include stationary sources of noise such as HVAC systems as well as noise associated with delivery vehicles and loading dock activities. Thus, with compliance with the provisions of the Town Noise Ordinance, potential noise impacts associated with HVAC systems and commercial loading dock activities would be considered less than significant and no mitigation measures are required. Ice Skating Pond As discussed previously in Section III, Project Description, the Project would be built in several phases with the construction of a Hotel, which includes an outdoor ice skating pond, occurring in the first phase. The operation of the outdoor ice skating pond would require the use of various types of equipment in order to freeze the water contained within the ice skating pond, to remove snow during the winter months and to maintain the surface of the ice. These various types of equipment all have the potential to generate noise which may exceed the Town of Mammoth Lakes Noise and Land Use Compatibility Criteria. The resulting noise level would be within the 50 – 65 dBA "normally acceptable" category for multi-family residential uses of the Land Use Compatibility		
Impact NOISE-5 Excessive Operational Groundborne Vibration		
Impacts of groundborne vibration associated with Project construction are discussed above under Impact Noise-2. The Project does not involve any other sources of groundborne vibration and groundborne noise. Therefore, Project impacts associated with excessive operational groundborne vibration would be considered less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact NOISE-6 Cumulative Impacts		
Development of the Project in combination with the related projects would result in an increase in construction-related and traffic-related noise in the Project area. The nearest residential related projects to portion of the Project site where construction activities would be concentrated, however, are located approximately 1,500 feet to the north ("The Sherwin") and 1,000 feet to the west ("Snowcreek VI – The Lodges" and "Snowcreek VII"). Due to the distance of these receptors from the areas of the Project site where most construction would be concentrated, and the fact that noise attenuates at approximately six dB (A) per doubling of distance, it is not likely that construction noise would be audible at these locations, thus greatly minimizing or eliminating the potential cumulative noise effect. Additionally, each of the related projects would be subject to Section 15.08.020 of the Town Municipal Code, which limits the hours of allowable construction activities. Each of the related projects would also be subject to Section 8.16.090 of the Town Noise Ordinance, which establishes noise standards for mobile and stationary construction equipment. With conformance with Sections 15.08.020 of the Town Municipal Code and 8.16.090 of the Town Noise Ordinance, the cumulative construction noise impact would be less than significant. Cumulative development in the Town would not result in the exposure of people to or the generation of excessive groundborne vibration, due to the localized nature of vibration impacts and the fact that all construction would not occur at the same time and at the same location. Therefore, this impact would be considered less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
POPULATION AND HOUSING (POP)		
Impact POP-1 Population Growth Associated with Employment		
Population Growth Due to Temporary Jobs The Project would result in employment opportunities during its construction period. Project-related construction workers would not be likely to relocate their place of residence as a consequence of working on the Project. Therefore, Project impacts would be less than significant and no mitigation measures are required. Population Growth Due to Permanent Jobs In addition to the new residents associated with the proposed residential uses, the Project would create an estimated 925 fulltime equivalent employees (FTEEs). The State of California documents the Town of Mammoths Lakes' unemployment rate at 5.3 percent, totaling 300 people in May 2007. Therefore, some of the employment associated with the Project could be filled by persons from the existing employment base in the Project area and/or by future residents at the Project site. However, for a conservative analysis, it is assumed that all 925 employees would relocate to the area, introducing 925 employee-related residents to the Town through indirect population growth due to permanent jobs. This is consistent with the growth anticipated in the 2007 General Plan. Therefore, impacts associated with population growth due to permanent jobs would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact POP-2 Population Growth Associated with New Infrastructure		
Infrastructure associated with the Project would serve the Project site and would not facilitate additional development as a result of increased infrastructure. Therefore, impacts associated with the development of the Project would be less than significant.	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact POP-3 Population Growth Associated with New Housing		
The Project would result in construction of 1,050 dwelling units. The Project is anticipated to contribute ten percent to future buildout development (in combination with all remaining Snowcreek developments). Therefore, impacts to population growth associated with the development of the Project would be less than significant. Additionally, the Project will comply with the Affordable Housing Mitigation Regulations Town Municipal Code 17.36 and will provide housing for the estimated 925 Full Time Equivalent Employees (FTEEs) associated with the Project. A housing mitigation development plan will be submitted along with the Project generating the need for the housing (see Appendix N). Currently, that plan includes a combination of the following measures: (1) 80 on-site units, (2) housing credits, and (3) payment of in-lieu fees. Housing will be provided at 250 square feet per FTEE. Therefore, impacts to workforce housing associated with the development of the Project would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact POP-4 Cumulative Impacts		
Of the 41 related projects listed, 34 include residential developments within the Town, totaling approximately 3,674 residential units that would accommodate a population of approximately 8,900 persons. When combined with the Project's 1,050 units and estimated population of 2,562 persons, cumulative residential development amounts to approximately 4,724 units and approximately 11,462 persons. By 2024, development of the Project in conjunction with the applicable related projects would account for approximately 28 percent of the 16,710 anticipated housing units and for approximately 19 percent of the 60,700 anticipated total population. For the reasons noted above, development of the Project in conjunction with the	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
applicable related projects would assist the Town in meeting its fair share of regional housing need, constituting a beneficial rather than adverse housing impact. Because development of the Project and the related projects would help address a portion of unmet housing demand and serve anticipated population growth in the Project area, either directly (e.g., by proposing new homes and businesses), or indirectly (e.g., through extension of roads or other infrastructure), cumulative impacts would be less than significant.		
PUBLIC SERVICES (PS)		
Impact PS-1 Police Services		
While the Project would increase the number of persons and level of activity on the Project site, given the types of uses associated with a resort recreation center, it is reasonable to expect that the Project would not result in a meaningful increase in the amount of crime in the Project area. Further, given that the Project is not expected to generate a considerable increase in crime, the affect that the Project would have on response times would be minimal, if at all. Additionally, according to the Mammoth Lakes Police Department (MLPD), although additional police equipment and staff would be necessary to accommodate the Project, the additional demand for police services created by the Project would not require the need for new or altered police facilities other than those currently planned for future police staffing and facilities. Therefore, Project impacts on police services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact PS-2Police Services (Cumulative)	***Mitigation Measures PS-2a through 2c***	
Increases in population in the Town have the potential to increase calls for police protection services. The impacts created by new development would be	**Mitigation Measure PS-2a** Bars and restaurants that cater to late night crowds will have trained security personnel in	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
reduced by the incorporation of security measures (e.g., security personnel staffed at any new bars and restaurants that cater to late night crowds and private security patrolling the Project) as well as the designation of Transient Occupancy Tax (TOT) dollars and Developer Impact Fees for police services. However, the Project in conjunction with the related projects would require that the new police facility be completed in the next two to three years or in the later phases of the Project to meet these needs. As a result, cumulative police protection impacts are considered to be significant. New police facilities would be required in order to fully mitigate this significant cumulative impact to a less-than-significant level. Because the Project in conjunction with anticipated cumulative development would result in significant impacts related to police protection services, the following mitigation measures are recommended by the MLPD:	order to reduce demand on police services. **Mitigation Measure PS-2b** Provide fair share of Developer Impact Fees to assist the MLPD in the construction of a public safety and dispatch facility and holding facilities as needed. **Mitigation Measure PS-2c** Provide private security within the site to patrol the non-residential complex in the evenings, if necessary, in order to reduce criminal behavior, and work in conjunction with law enforcement to solve crimes and crime problems.	
Impact PS-3 Fire Services		
The existing major public roads that serve the Project site are Old Mammoth Road, Minaret Road and Fairway Drive. New internal access roads would be created on the Project site. Emergency vehicles would circulate through the Project area using the internal roadway system. Secondary access for fire safety would be developed in conjunction with the roadway system to provide looped secondary emergency vehicle access and egress. Emergency access would be provided by creating a secondary access point to the Project off of Old Mammoth Road. Fire lanes, turning radii and back up space around buildings would be designed in cooperation with local officials so as to be adequate for emergency and fire equipment vehicles. Pavements would be designed to support loads created by emergency vehicle traffic. Standpipe and fire suppression systems connections would be incorporated into architectural and landscaping design elements where practical and in locations accessible to fire equipment.	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
The Project would incorporate a number of fire safety features in accordance with applicable MLFPD fire-safety code and Town regulations for construction, access, fire flows, and fire hydrants. Considering that the Project site is undeveloped and that current use of the site is limited to open space, the Project would represent a more intense use of the site. Although the relationship is not directly proportional, more intense uses of land typically result in the increased potential for fire and emergency incidents. Thus, the Project would create an increased demand for fire protection services. However, according to the Mammoth Lakes Fire Protection District (MLFPD), with the mutual-aid agreement with neighboring fire districts, their current staffing and equipment, facility levels are adequate to accommodate the Project's demand for fire protection services. In addition, the MLFPD is a participant in the Town's Emergency Operations Plan (Plan) which includes the Project area. The Plan would be revised with the development of the Project to include any needed updates or changes. It would be anticipated that only minor changes would be needed to update the plan based upon the current plans and zoning. Therefore, Project impacts related to fire protection services would be less than significant and no mitigation measures are required.		
Impact PS-4 Fire Services (Cumulative)		
The Project in conjunction with the related projects does cumulatively increase the demand for fire protection services in the MLFPD. This is primarily a result of the number and type of new buildings that the Project and the related projects bring to the MLFPD. The MLFPD is anticipating the hiring of more fulltime positions to increase their capability to respond to additional calls and the associated administrative work that will come along with increased development and increased traffic volumes in the Town. The increase in staff and equipment is being provided for by increases in property tax and Development Impact Fees (DIFs). MLFPD recognizes that the call volume and	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
incident complexity will continue to increase as the population and unit numbers increase. As stated previously, MLFPD is in the process of remodeling and enlarging Fire Station One in response to additional community development. The MLFPD is anticipating the hiring of more fulltime positions to increase their capability to respond to additional calls and the associated administrative work that will come along with increased development. MLFPD is also involved in the development of a strategic plan that will aid the department in planning for the future. Therefore, cumulative impacts to fire protection services would be less than significant and no mitigation measures are required.		
Impact PS-5 School Services		
The schools that would serve the Project experience steady enrollment and are currently at or near capacity. The Project has the potential to generate approximately 475 Kindergarten through Twelfth grade students. Based on the developer fees established by each of the school districts, the Project applicant would be required to pay $2.63 per square foot of residential development and $0.42 per square feet of commercial development. As stated previously, provided in §65996 of the California Government Code, the payment of such fees is deemed to fully mitigate the impacts of new development on school services. Therefore, with payment of these required developer fees, Project impacts to school services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact PS-6 School Services (Cumulative)		
Implementation of the Project in conjunction with the related projects would further increase the demand for school services. However, as with the Project, the applicants of the related projects would be required to pay developer fees to the MSUD; payment of these fees would fully mitigate any impact that the	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
related projects would have on school services. As stated previously, the Project's impacts to school services would be less than significant. Therefore, cumulative impacts to school services would be less than significant and no mitigation measures are required.		
Impact PS-7 Parks and Recreation Services		
The Project's proposed recreational and public amenities (as listed above) in conjunction with the Town's current facilities and the collection of Developer Impact Fees (DIFs) that support the Town's park and recreation fund (as required by Town Municipal Code 15.16.081), would be adequate to accommodate the Project's demand for parks and recreational services. Appendix M of this Draft EIR includes the Town's current Developer Impact Fee Schedule dated June 2007. As development occurs within the Project area, Developer Impact Fees will be paid to the Town to offset the recreational facilities and maintenance. No additional parks or recreational facilities beyond what are proposed would be required. Therefore, Project impacts to park services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact PS-8 Parks and Recreation Services (Cumulative)		
As with the Project, the applicants of the related projects would be required to pay Developer Impact Fees that support the Town's park and recreation fund; payment of these fees would fully mitigate any impact that the related projects would have on park and recreational services. As stated previously, the Project's impacts to park services would be less than significant. Therefore, cumulative impacts to park services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact PS-9 Snow Removal Services		
Roadway maintenance and snow removal on private roads and private property	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
is the responsibility of the land owners. Therefore, Project impacts to the Town's snow removal services would be less than significant and no mitigation measures are required.		
Impact PS-10 Snow Removal Services (Cumulative)		
The Project in conjunction with the related projects would not cumulatively increase the demand for snow removal services in the Town. The related projects in the Town are primarily private projects and therefore, as with the Project, the private land owners would be responsible for their own snow removal services. This would fully mitigate any impact that the related projects would have on snow removal services in the Town. As stated previously, the Project's impacts to snow removal services would be less than significant. The implementation of the related projects would not require the need for new staff or new or altered public works facilities. Therefore, cumulative impacts to snow removal services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
RECREATION (REC)		
Impact REC-1		
Following the Town's requirement of five acres of parkland per 1,000 residents, the parkland requirement for the Project is approximately 12.81 acres. The Project would expand the existing privately owned, but publicly accessible golf course, into the 155-acre Snowcreek Golf Course. In addition, as previously stated the Project would provide other recreational facilities including a publicly accessible golf clubhouse, Outfitters' Cabin, Interpretive Center, and ice skating rink/pond. The Project's proposed recreational and public amenities, as listed above, in conjunction with the Town's current facilities and the collection of Developer Impact Fees (DIFs) that support the Town's park and recreation fund would be adequate to accommodate the Project's demand for parks and	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
recreational services. Therefore, with payment of DIFs and the Project's provision of new publicly available recreational amenities, the Project's impacts on Town parkland would be less-than-significant and no mitigation measures are required. The National Forest land surrounding the Project site will likely experience increased use as a result of Project implementation. The development of the Outfitters' Cabin as a focal point for entry into the Inyo National Forest would alleviate existing incursions to private property by backcountry users and would serve to reduce impacts observed at other access routes in current use. The Project would not physically alter or produce any direct impact on land within the Inyo National Forest. Therefore, potential impacts to the National Forest land adjacent to the Project site would be less-than-significant and no mitigation measures are required.		
Impact REC-2		
Implementation of the Project would result in the removal of privately owned publicly accessible driving range facilities located in the eastern section of parcel 40-070-10 and the northeast corner of parcel 40-070-11. Additionally, the existing privately owned publicly accessible nine-hole Snowcreek Golf Course would be temporarily closed for minor changes. However, development on the Project site would include a resort component with recreational elements and additional, stand-alone recreation components. No policies concerning the availability of golf driving ranges have been adopted by the Town. Thus, despite the removal of a privately owned publicly accessible driving range and the temporary loss of use of the existing nine-hole golf course for minor changes, the Project would increase the overall amount of public and private recreation opportunities in the Mammoth Lakes area. Therefore, Project impacts affecting Town recreation facilities would be less-than-significant.	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact REC-3		
The Project consists of build-out of the remaining approximately 237 acres of the Master Plan area in order to fulfill the vision of the previously approved 1974 and 1981 Master Plans. The Project is viewed as a resort recreation center with residential uses, outdoor use areas, and multiple options for recreational and public amenities (as described in Impact REC-1). However, the Project also relies on existing recreational elements in the surrounding area. These recreational elements include, but are not limited to, the Mammoth Mountain Ski Area, the Sherwin Range, Kerry Meadow Trail and the Inyo National Forest. Because much of the Project relies on and will create some additional demand upon these existing recreational elements, the Project will have some impact, but not a significant impact, on existing recreational resources, as previously discussed. The privately owned Project site has periodically been crossed by pedestrians and hikers for purposes of obtaining access to the Sherwin Range and Inyo National Forest. The development of the Project will require persons who may have previously crossed the Project site to now hike around the perimeter of the Project site to reach these areas. The Project applicant has proposed to provide a portal along the eastern edge of the Project site. That access, while not as convenient as the current access points and routes, will be permitted and lawful and will be enhanced with a facility that will provide opportunities for persons entering those public lands to rent ski equipment and other sports equipment. With this portal and the associated amenities, the impact will be less than significant.	No mitigation measures are required.	Less Than Significant
Impact REC-4 Cumulative Impacts		
The related projects in the Town are primarily residential projects. Residential projects typically have the greatest impact on parks and recreational facilities,	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
because they generate the greatest users of parks and recreational facilities – families with children. Therefore, development in Mammoth Lakes will continue to increase demand at all levels for recreational opportunities and facilities. However, as with the Project, the applicants of the related projects would be required to pay DIFs that support the Town's park and recreation fund; payment of these fees would fully mitigate any impact that the related projects would have on park and recreational services. As stated previously, the Project's impacts to park services would be less than significant. Therefore, cumulative impacts to park services would be less than significant and no mitigation measures are required.		
TRANSPORTATION/TRAFFIC (TRANS)		
Impact TRANS-1 Existing Plus Project Intersection LOS		
The Project trips were distributed to the surrounding circulation system based on the location of activity centers in the Town and the location of the Project in relation to the Town's recreational and commercial areas. Approximately 15 percent of Project traffic is destined west to the Little Eagle Ski Area and Eagle Lodge via Meridian; 30 percent north to The Village, Canyon Lodge and Main Lodge via Minaret Road; 25 percent to the Downtown areas via Old Mammoth Road and Meridian Boulevard; 10 percent east via Main Street and Meridian Boulevard; 15 percent to Main Street attractions via Minaret Road and Old Mammoth Road; and 5 percent east via Old Mammoth Road. All of the study area intersections are forecast to operate at a satisfactory LOS in the existing plus Project condition. With existing conditions, Project-generated impacts on intersection LOS would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact TRANS-2 Cumulative Plus Project Intersection LOS	***Mitigation Measure TRANS-2 Cumulative Plus Project Intersection LOS***	
The Minaret Road/Main Street intersection, one of the five study area intersections, is forecast to operate at an unsatisfactory LOS in the cumulative plus project condition.	Evaluation of intersection LOS shows that the addition of the Project traffic to the cumulative traffic will significantly impact the Minaret Road/Main Street intersection in the cumulative plus Project scenario, according to the Town's criteria. The following improvement would be required for the cumulative plus Project condition to mitigate the intersection to LOS D or better: • Minaret Road/Main Street. Provide eastbound right-turn overlap signal phasing consistent with General Plan recommendations. All costs for the implementation of this improvement should be eligible for a credit to Developer Impact Fees (DIF). This mitigation would be implemented as part of a traffic mitigation program that would be funded by the DIF. Implementation of this mitigation measure would reduce this impact to a less-than-significant level.	Less Than Significant
Impact TRANS -3 Internal Circulation and Access		
Access to the Project facilities and lodging would be from an internal roadway system. The number of internal intersections at the Project site would be limited. New internal access roads would be created throughout the Project site. All internal circulation would interface at various points with links to external trails accessing public lands to the south (Sherwin Range) or the eastern forest service lands. Internal roadways would be privately owned and maintained. The internal roadway system would provide access to various residential areas and commercial land uses throughout the Project site. Trails and/or emergency access roadways would allow secondary points of access from internal streets and roadways. All side intersecting streets to the main spine road should be stop-controlled, and an all-way stop would be provided at the intersection of the spine road and the road leading to Snowcreek V. Single-lane roundabouts may also be substituted for the stop-controlled and all-way stop intersections. Roadway designs would fit the land and be sensitive to topography, vegetation	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
and views. Safe crossings for pedestrians would be included and crosswalks would be provided to cross Old Mammoth Road at the Minaret Road round-about. Therefore, impacts to internal circulation and access would be less than significant and no mitigation measures are required.		
Impact TRANS-4 Parking		
The Project would provide understructure parking facilities for the majority of the development. Surface parking for check in, tour bus, and delivery/service vehicles would also be provided. Parking structures would be designed to provide adequate width and height to accommodate most private vehicles. Short-term surface parking would be provided adjacent to the check-in locations, with guests directed to underground parking structures located under the major residential buildings. Short-term parking uses include passenger drop off and loading, service, deliveries, transit vehicles, and guest parking for residential uses. Some buildings may share check-in and parking access. Affordable residential units would be allowed surface parking for both resident and guest use. Parking for the golf course would be provided through the Hotel parking. Surface parking would also be provided at the Outfitters' Cabin and the Store and Interpretive Center. There are no plans to provide any permanent day skier parking within the Project site. The project will be required to provide adequate parking as part of the approval process. Therefore the project would not result in inadequate parking capacity and impacts would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact TRANS-5 Bicycle and Pedestrian Facilities		
The Town Trail System Master Plan proposes the extension of facilities to promote such non-motorized alternative forms of transportation as walking, bicycling, and cross-country skiing. All aspects of the Project would be connected with a series of paths and walkways to accommodate pedestrians and bicycle use. Links would occur at various points to Old Mammoth Road and its walking and bicycle paths. The pedestrian and bicycle system would include interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and residential areas. Walkways to and from residential areas, as well as trail connections that would tie into the larger Town wide recreational trail network which includes pedestrian trails, bike lanes and sidewalks that are adjacent to major roadways such as Old Mammoth Road, Minaret Road, Sherwin Creek Road, and Fairway Drive. When possible, the major internal pedestrian corridors would be located adjacent to landscape features. All Project bicycle and pedestrian facilities would ultimately connect with the Town's trail system; thereby providing the Project with a connection to Town-wide facilities. Therefore, impacts would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact TRANS-6 Transit		
The Project would include connections to the Mammoth Lakes Transit Red Line and a shuttle service. The Project would include three specific transit improvements to and from the site. These improvements include: • A revision to the Red Line bus route that includes a stop at the Hotel entrance on the Project site and a return to the original bus route; • Exclusive shuttle service for hotel guests to Eagle Lodge and the Village/Gondola area; and	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
• Additional (three to four) shuttle vans provided by the Snowcreek VIII master homeowners association for use by all residents for trips to major visitor stops including Eagle Lodge, the Village, and Main Street and Old Mammoth Road commercial areas. Bus/shuttle shelters would be provided at transit stops. These shelters would be sited to facilitate the safety, use and comfort of passengers using transit within the Project area and would be accessible via the local pedestrian trail and walkway network. These improvements would benefit residents of the Project area by providing on-site service and connections to the greater Mammoth Lakes transit system, thereby potentially increasing the use of transit within the Project area and reducing vehicle use. However, it is not anticipated that any increases in transit use would result in demand for the Mammoth Lakes Transit Red Line that cannot be accommodated. Therefore, impacts to transit would be less than significant and no mitigation measures are required.		
Impact TRANS-7 Hazards		
New internal access roads would be created throughout the Project site. Access to the Project facilities and lodging would be from an internal roadway system and the number of internal intersections at the Project site would be limited. Trails and/or emergency access roadways would allow secondary points of access from internal streets and roadways. All side intersecting streets to the main spine road would be stop-controlled, and an all-way stop would be provided at the intersection of the spine road and the road leading to Snowcreek V. Roadway designs would fit the land and allow for views of oncoming traffic. Safe crossings for pedestrians would be included and crosswalks would be provided to cross Old Mammoth Road at the Minaret Road round-about. Fire lanes, turning radii and back up space around buildings would be designed in cooperation with local officials so as to be adequate for emergency and fire equipment vehicles. No agricultural land uses are located in proximity to the	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Project site. Therefore, the Project would not result in traffic hazards associated with incompatible uses, such as farm equipment. The Project would not substantially increase hazards due to a design feature or incompatible uses and impacts would be less than significant and no mitigation measures are required.		
Impact TRANS-8 Emergency Access		
Emergency vehicles would circulate through the Project area using the internal roadway system. In addition, supplemental fire lanes would be developed in conjunction with the roadway system to provide looped secondary emergency vehicle access and egress. Fire lanes, turning radii and back up space around buildings would be designed in cooperation with local officials so as to be adequate for emergency and fire equipment vehicles. Pavements would be designed to support loads created by emergency vehicle traffic. Standpipe and fire suppression systems connections would be incorporated into architectural and landscaping design elements where practical and in location accessible to fire equipment. The Project would include a secondary Project access at the intersection west of Minaret Road/Old Mammoth Road, which would provide additional access to the site for residents or emergency vehicles. Therefore, the Project would not result in inadequate emergency access and impacts would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact TRANS-9 Policy Consistency		
As noted, the Project will provide for pedestrian and bicycle facilities, and would provide for bus/shuttle shelters sited to facilitate the safety, use and comfort of passengers using transit within the Project area. Therefore the Project would not conflict with adopted policies, plans, or programs supporting alternative transportation and impacts would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact TRANS-10 Construction		
During construction, more vehicle trips would be generated during the grading/excavation phase than during other portions of Project construction activity. Other construction phases (e.g., hauling of equipment and materials) would generate comparatively fewer trips; thus, impacts associated with grading phase traffic would be considered the worst-case situation during Project construction. Grading operation may involve up to 10 haulers conducting 180 loads per day (180 trips in and 180 trips out). These trips would occur on no-snow conditions weekdays, Monday through Friday. The grading operation of 18 trips in and 18 trips out during the weekday peak hour would have no impact on the traffic impact analysis's typical winter Saturday. This volume of truck trips would be equivalent to trips generated by approximately 150 residential units using a passenger-car equivalent of two. Therefore, the Project's construction impacts would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact TRANS -11 Cumulative Impacts		
The long-range Town General Plan build out scenario from the Eagle Lodge Traffic Impact Analysis (LSC Consultants, Inc., August 2006) for 2024 plus Project traffic projections and mitigation measures from the Town General Plan Update DEIR Traffic Analysis (LSC Consultants, Inc., November 2004) were used to evaluate long-range impacts. The Project would represent a reduction in size by approximately 200 units from that assumed in the Town General Plan Update DEIR Traffic Analysis for the Project site. Therefore, LOS conditions will be improved from those reported in the General Plan analysis and the Project would not contribute to a significant adverse cumulative impact. All study intersections would continue to operate at satisfactory LOS (LOS D or better) under long-range conditions. Thus, cumulative impacts would be less	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
than significant and no mitigation measures are required for the long-range Town build-out conditions.		
UTILITIES & SERVICE SYSTEMS (UTIL)		
Impact UTIL-1 Wastewater Generation		
Wastewater from the Project site would be conveyed via wastewater infrastructure to the Wastewater Treatment Plant (WWTP). Currently, the WWTP treats an average daily flow of 1.6 million gallons per day (mgd), a peak daily flow of 2.6 mgd, and has capacity to treat 4.9 mgd. This translates into a remaining capacity of 2.3 mgd of wastewater at average daily flows and 3.2 mgd of wastewater at peak daily flows that can be treated at the WWTP. The Project would represent approximately 4 percent of the peak daily flow capacity of the WWTP treatment for peak daily flows up to 4.9 mgd. Thus, Project impacts related to wastewater treatment capacity would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact UTIL-2 Wastewater Infrastructure		
The applicant would be responsible for all costs associated with the installation of wastewater infrastructure on the Project site and the connection fees paid to Mammoth Community Water District (MCWD) for the Project would help to pay for the necessary upgrades to the MCWD's sewer collection pipelines described above. In consideration of the above, Project impacts related to wastewater infrastructure would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact UTIL-3 Wastewater Generation (Cumulative)		
The potential need for the related projects to require upgrades to the WWTP to accommodate wastewater generated by these projects is site-specific, and there is little, if any, cumulative relationship between the development of the Project	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
and the related projects. In addition, many of the related projects consist of redevelopment that would result in the elimination of existing wastewater generation patterns at these sites. The MCWD has a remaining capacity of 2.3 mgd of wastewater at average daily flows and 3.2 mgd of wastewater at peak daily flows that can be treated at the WWTP; thus cumulative impacts to the remaining capacity of the WWTP would be less than significant and no mitigation measures are required.		
Impact UTIL-4 Wastewater Infrastructure (Cumulative)		
MCWD has identified deficiencies in the collection system that would be exacerbated by the Project and the related projects. The potential need for the related projects to require upgraded wastewater lines to accommodate wastewater generated by these projects is site-specific, and there is little, if any, cumulative relationship between the development of the Project and the related projects. In addition, the connection fees paid by individual applicants would help to pay for the necessary upgrades to the sewer collection pipelines described above. In consideration of the above, cumulative impacts related to wastewater infrastructure would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact UTIL-5 Water Supply	***Mitigation Measures UTIL-5a through 5f***	
The Project's estimated average water demand is approximately 204,152 gallons per day (gpd) (229 acre feet per year [afy]) and the peak water demand is 316,133 gpd (354 afy). According to the existing water supply available to the MCWD there is sufficient water supply at average and peak times in both normal and multiple dry years for the Project. Thus, Project impacts to water use within the Town would be considered less than significant and no mitigation measures are required. However, the following mitigation measures are recommended.	**Mitigation Measure UTIL-5a Water Supply** The applicant should ensure that the landscape irrigation system be designed, installed and tested to provide uniform irrigation coverage. Sprinkler head patterns shall be adjusted to minimize over spray onto walkways and streets. **Mitigation Measure UTIL-5b Water Supply** The applicant should install either a "smart sprinkler" system to provide irrigation for the landscaped areas or, at a minimum, set automatic irrigation timers to water landscaping during early morning or late evening hours to reduce water losses from evaporation.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	Irrigation run times for all zones shall be adjusted seasonally, reducing water times and frequency in the cooler months (fall, winter, spring). Sprinkler timer run times shall be adjusted to avoid water runoff, especially when irrigating sloped property. **Mitigation Measure UTIL-5c Water Supply** The applicant should select and use drought-tolerant, low-water consuming plant varieties to reduce irrigation water consumption. **Mitigation Measure UTIL-5d Water Supply** The applicant should install low flush water toilets and urinals and shall limit the number of showerheads to one high efficiency fixture per stall, in new construction. Low-flow faucet aerators should be installed on all sink faucets. **Mitigation Measure UTIL-5e Water Supply** The applicant shall be subject to the provisions of a recycled water ordinance adopted by the Town pursuant to Article 10.9, beginning with Section 65601 of the Government Code, and titled Water Recycling in Landscaping Act (Act) at such time as the Town is notified by the Mammoth Community Water District of the future availability of recycled water, at costs reasonably competitive with the costs of untreated groundwater. In addition, the Snowcreek Master Plan shall include a provision that, for all projects constructed or approved prior to the notice, the applicant shall use their best efforts to use recycled water consistent with the Town, the Act, and water district policy.	
Impact UTIL-6 Water Infrastructure:		
The Project includes installation of water infrastructure within the Project site to convey water from the existing MCWD water lines to usage points within the Project. However, design plans for this internal Project water supply distribution system are not complete at this time. According to MCWD, areas of potential deficiency have been identified in water lines in the Project area depending on where the Project would connect with existing water lines. The applicant would be responsible for all costs associated with the installation of	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
water infrastructure on the Project site and the connection fees paid to MCWD for the Project would help to pay for the necessary upgrades to the MCWD's water pipelines described above. In consideration of the above, Project impacts related to wastewater infrastructure would be less than significant and no mitigation measures are required.		
Impact UTIL-7 Cumulative Water Supply	***Mitigation Measure UTIL-7***	
Implementation of the Project in combination with the related projects would further increase demands on water supply and conveyance infrastructure. According to the Town, all of the related projects are generally consistent with their respective land use designations. There would be insufficient supplies of water during dry years at Town buildout without the Project. Consequently, there would also be insufficient water for the Project plus the related projects during dry water years. MCWD is working to develop new groundwater sources, use recycled water, and implement water restrictions as a means to increase supplies to resolve any potential water supply deficiencies during drought periods. However, even with full implementation of these various water supply projects, it is expected that insufficient water would be available to meet projected demand during a single dry year. Therefore, because these future water sources do not exist at present the Project's contribution to overall water supply demand within the Town would be cumulatively considerable, and cumulative water supply impacts would be significant. Implementation of the following mitigation measure would help to reduce the significant cumulative water supply impacts, however cumulative water supply impacts would remain significant.	The Town shall not approve new development applications that would result in a water demand in excess of available supplies as determined by the Mammoth Community Water District. The Town shall work with Mammoth Community Water District to ensure that development projects include phased demand increases so that the development of necessary additional water supply sources is established prior to respective development demand occurring.	Significant and Unavoidable
Impact UTIL-8 Cumulative Water Infrastructure		
Mammoth Community Water District (MCWD) has identified deficiencies in the water lines that serve the Project area that, depending on where the Project	No mitigation measures are required.	Less Than Significant

Table I-1

Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
connects with existing water lines, could be exacerbated by the Project and the related projects. The pipeline replacement work is currently scheduled to occur between 2010 and 2013, and MCWD has stated that the work must be done prior to full occupation of the Project area. MCWD has developed future demand projections for the General Plan Update Draft EIR that resulted in plans for some infrastructure improvements. The potential need for the related projects to require upgraded water lines to accommodate their water demands requires site-specific evaluation and there is little, if any, cumulative relationship between the development of the Project and the related projects. In addition, the connection fees paid by individual applicants would help to pay for the necessary upgrades to the water lines described above. In consideration of the above, cumulative impacts related to water infrastructure would be less than significant and no mitigation measures are required.		

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II. ENVIRONMENTAL SETTING

A. INTRODUCTION

This section provides a brief overview of the Project site's existing regional and local setting. Additional descriptions of the environmental setting as it relates to each of the environmental issues analyzed in Section IV (Environmental Impact Analysis) of this EIR are included in the environmental setting discussions contained within Sections IV.A through IV.N. Also provided in this section is a list of related projects, which is used as the basis for the discussions of cumulative impacts throughout Section IV.

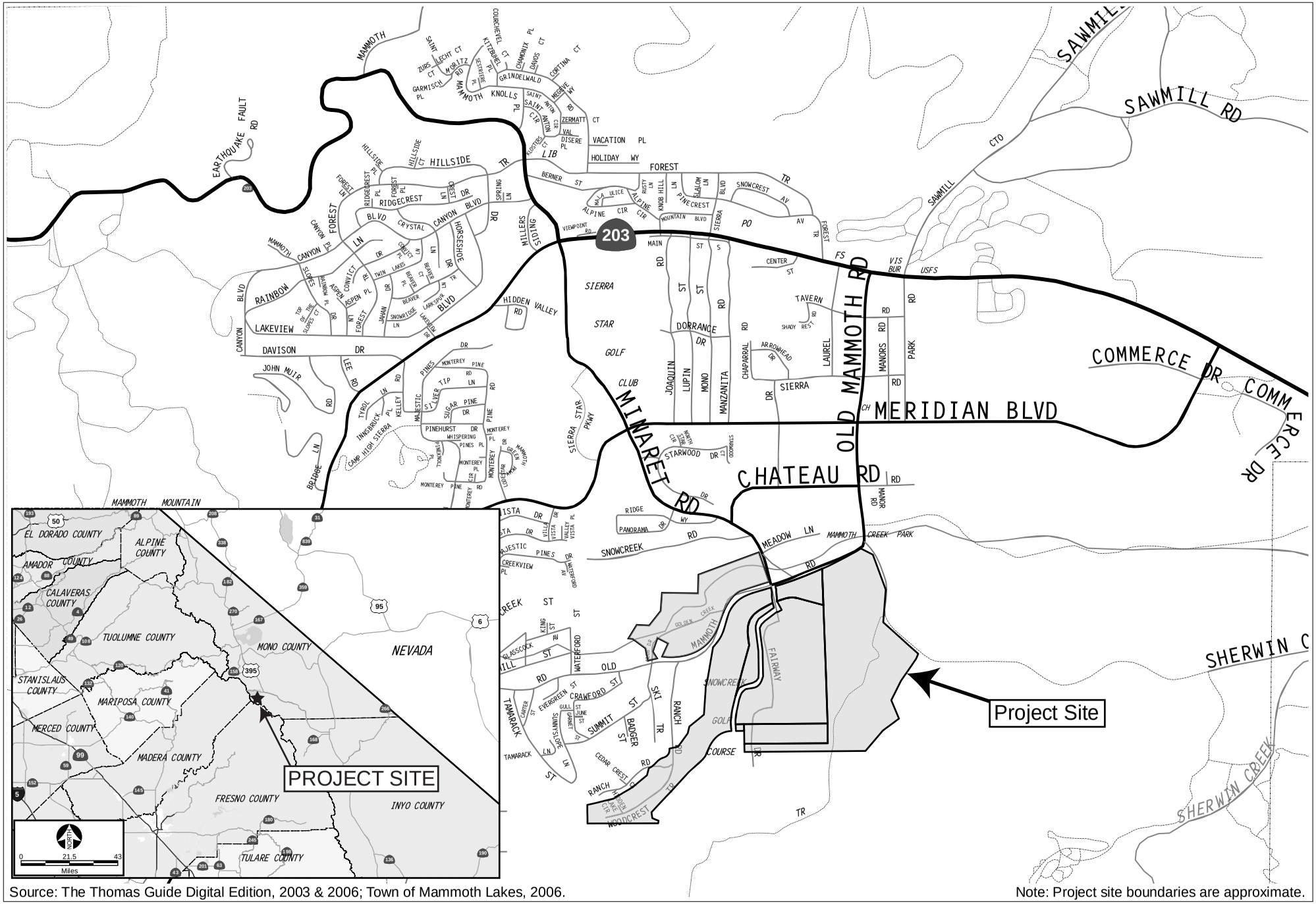
B. EXISTING CONDITIONS

Regional Setting

The Project site is located in the Town of Mammoth Lakes (Town), Mono County, California. The Town is located on the eastern slopes of the Sierra Nevada at an elevation of approximately 7,900 feet above sea level within Section 34, Township 3 South, and Range 27 East. The Town is located approximately 168 miles south of Reno, Nevada, and approximately 310 miles north of Los Angeles, California. Neighboring communities of the Town include June Lake to the northwest, Benton to the east, and Tom's Place to the southeast (refer to Figure II-1 and Figure II-2). Regional access is provided by U.S. Highway 395 and California State Highway 203. Local roadways which provide access to the site include Minaret Road to the north, Fairway Drive and Old Mammoth Road in the central portions of the site, and Sherwin Creek Road to the east.

Local Setting

The Project site is located in southeast Mammoth Lakes where Old Mammoth Road intersects with Minaret Road. The Project site is at the foot of the Sherwin Range, a steep extension of the Sierra Nevada with elevations up to 11,728 feet. The Project would address the development of approximately 237 acres of the approximate 440 acres that comprise the 1981 Master Plan area. As finalized in 1981, the Snowcreek Master Plan affects 345 acres. However, in 2005 a land exchange (2005 Land Exchange) was completed between the United States Forest Service (USFS) and the Snowcreek Investment Company in order to acquire enough land for a nine-hole addition to create an 18-hole golf course; this is discussed in greater detail in Chapter III (Project Description). Therefore, the Project's acreage has been adjusted to reflect the additional acreage acquired in the land exchange and lands which have been removed from the Resort zone (i.e., the Catholic Church site and the single family residential subdivision).



Source: The Thomas Guide Digital Edition, 2003 & 2006; Town of Mammoth Lakes, 2006.

Note: Project site boundaries are approximate.

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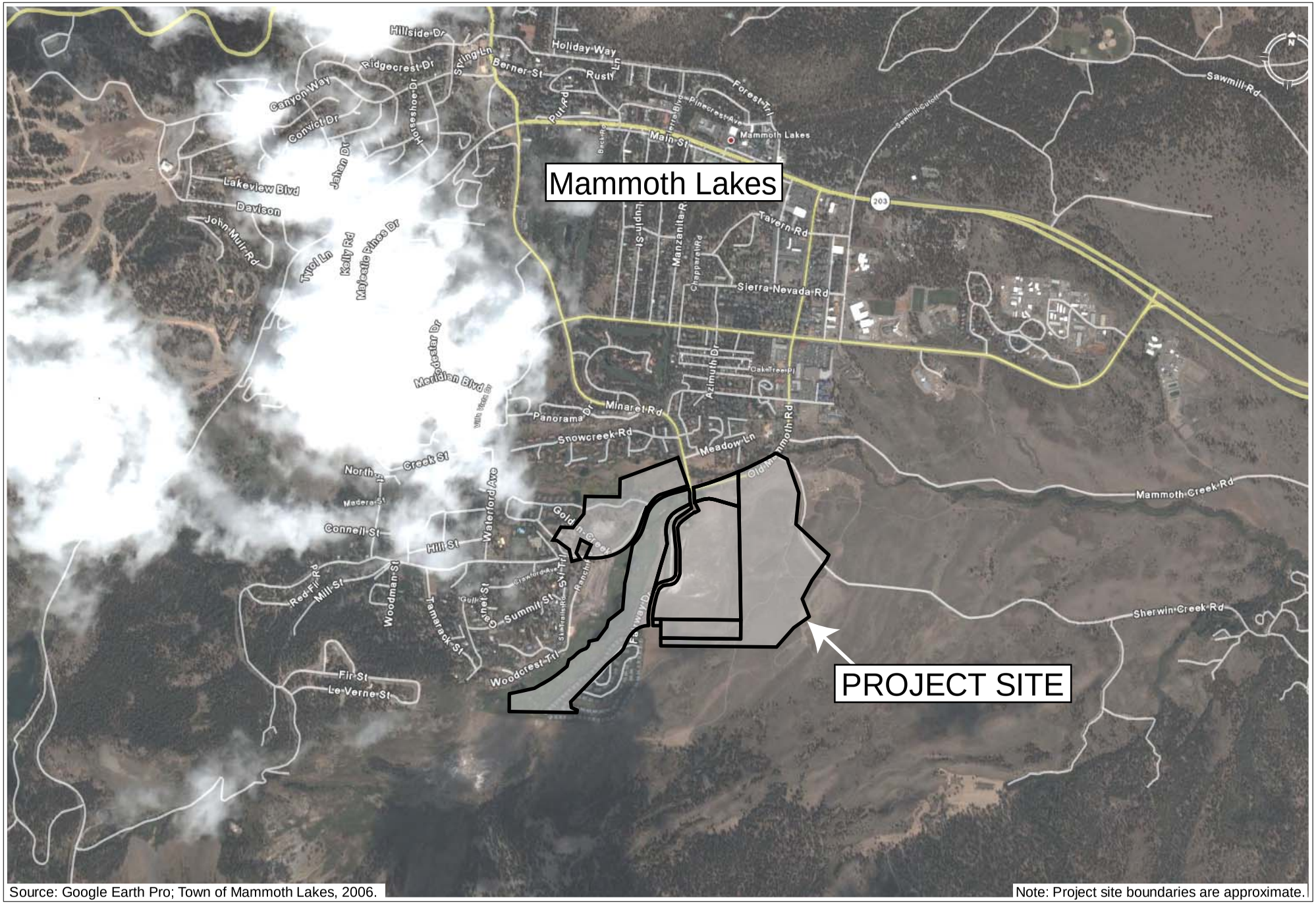
NORTH

0 1050 2100 3150 4200
Feet

Figure II-1
Regional and Vicinity Map



Source: Google Earth Pro; Town of Mammoth Lakes, 2006.

Note: Project site boundaries are approximate.

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Environmental Planning and Research

NORTH

Figure II-2
Aerial Photograph

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The Project site is composed of Assessor's Parcel Numbers (APNs) 40-040-20, located on the north side of Old Mammoth Road and on the west side of Minaret Road, and APNs 40-070-10, 40-070-11, 40-070-12, 40-070-13, 40-070-23, 40-140-04, and 40-140-05 located on the south side of Old Mammoth Road and west of Sherwin Creek Road.

The parcel north of Old Mammoth Road and west of Minaret Road (APN 40-040-20) comprises a total of approximately 38 acres. Of this acreage, the approved Snowcreeek VII development encompasses approximately 23 acres of the southwest portion of the parcel and the northeast portion of the parcel encompasses approximately 15 acres. The seven parcels south of Old Mammoth Road comprise a total of approximately 222 acres, of which approximately 56 acres (APN 40-070-23) is occupied by the existing nine-hole golf course. The overall terrain of the site is relatively flat, with a slight rise along the southerly boundary. Elevations range from approximately 7,870 to 7,940 feet (2,400 to 2,420 meters). Mammoth Creek runs west to east through the northern portion of the site.

Throughout this Draft EIR the following three terms are used to identify the Project's boundaries as shown on Figure II-3. The terms are defined as follows:

1. **Project Site:** The Project site includes the parcel north of Old Mammoth Road and west of Minaret Road, and the seven parcels south of Old Mammoth Road.

2. **Study Area:** The study area occupies portions of the Project site, as defined above. The study area is the portion of the Project site that has been analyzed in this Draft EIR. The study area is made up of the property that will be physically developed and the property that will be preserved as open space. It is essentially the same as the Project site; however it does not include the portion of APN 40-040-20 north of Old Mammoth Road that is Snowcreek VII.

3. **Development Area:** The development area is the area where physical development will occur. It is the same as the study area, but it does not include the land designated as open space and the existing golf course ponds and associated drainages. As shown on Figure II-3, the development area extends beyond the Town's Urban Growth Boundary (UGB). The UGB was adopted in 1993 to prevent urban sprawl and to maintain a clear delineation between the developed portions of the community and the surrounding National Forest lands. For this reason, the Project's residential, commercial lodging and transient occupancy development is not permitted to extend beyond the UGB. Recreational uses (such as the expansion of the golf course) are permitted in the area beyond the UGB.

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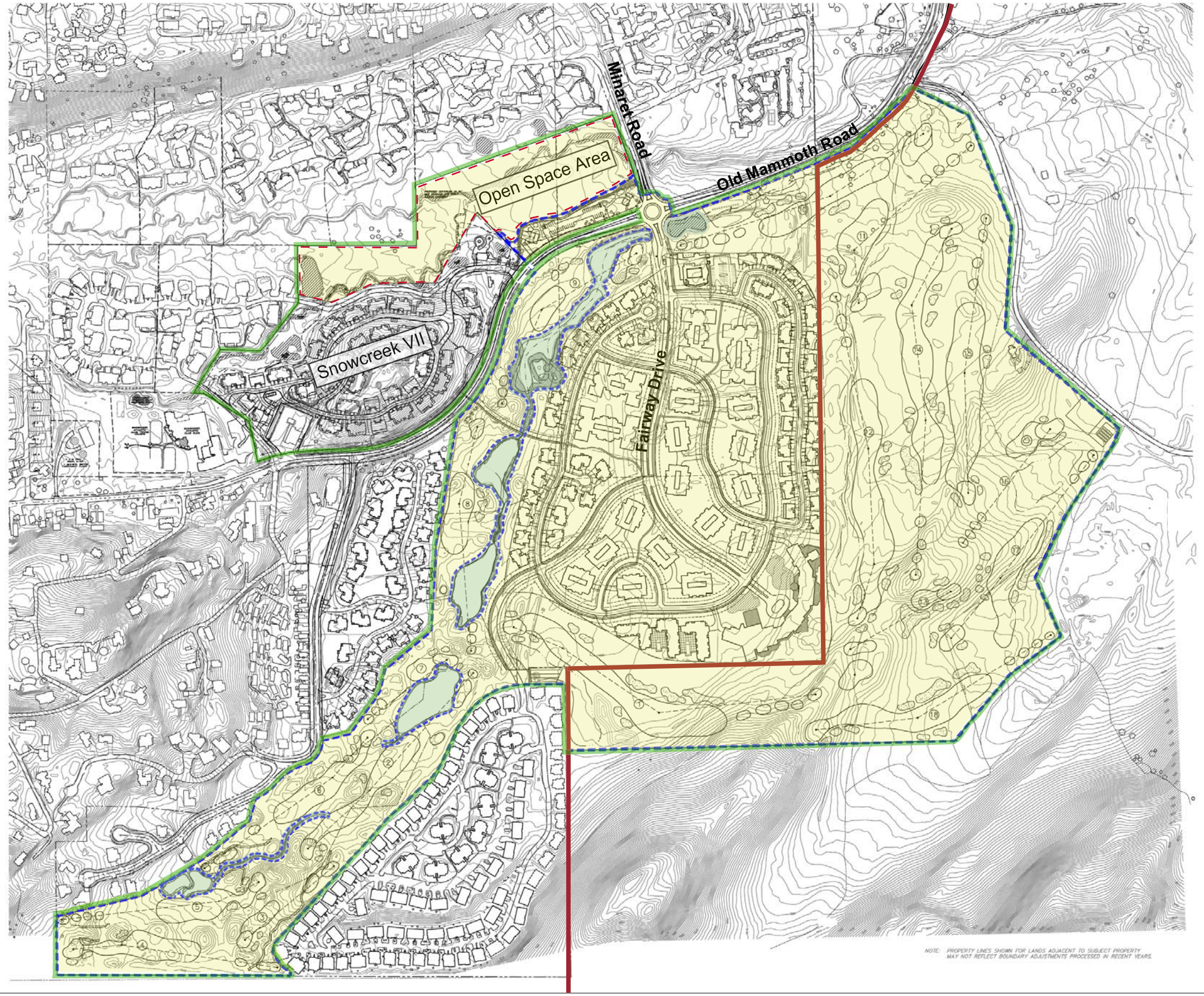

Legend

- Project Site
- Development Area
- Open Space Area
- Study Area (Snowcreek VIII)
- Existing Golf Course Ponds
- Urban Growth Boundary

Notes:
1) The Study Area is the same as the Project Site, except that it excludes the approved Snowcreek VII development area.
2) The Development Area excludes the Existing Golf Course Ponds and Open Space Area.

Source: Scheurer Architects, CAJA, 2007.

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NORTH

0 250 500 750 1000
Scale (Feet)

Figure II-3
Project Areas Map

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The Project site is primarily undeveloped and parcels south of Old Mammoth Road have been most recently used for cattle grazing. Previous uses of the site are discussed in more detail in Section IV.E (Cultural Resources) of this Draft EIR. The existing uses on the Project site include a public golf driving range, the Snowcreek Investment Company L.P. offices and Snowcreek sales office, both of which are considered temporary facilities. The Inyo National Forest Service administrative site (i.e., tack room and storage facilities) is currently located on the far eastern edge of the Project site. These facilities are in the process of being relocated to United States Forest Service (USFS) land east of Sherwin Creek Road.

The 1987 General Plan is currently in the process of being updated following a four-year planning and review process. A Draft Program EIR was previously prepared and circulated regarding an earlier version of the General Plan Update. A Notice of Preparation (NOP) for the Draft Program EIR was distributed on April 25, 2003. A Draft Program EIR was prepared and distributed to the public for review from February to May 2005 for public comments. Based on the extent and range of comments received, the Town determined that the proposed General Plan should be revised to the extent that required recirculation of a Revised Draft Program EIR. The Revised Draft Program EIR was circulated for public review from October 31, 2005 to December 14, 2005. The Town adopted the 2007 General Plan on August 15, 2007 and is currently considering the Revised Final Program EIR on the General Plan Update for certification. Because the certification of the Revised Final Program EIR is an ongoing process, the standard for analysis used in this Draft EIR is based on both the 1987 General Plan and the 2007 General Plan.

The 1987 General Plan land use designations for the Project site are Resort (R), Open Space (OS), and Open Space Stream Corridor (OSSC). These land use and zoning designations describe the design focus for development at the Project site. The 2007 General Plan also designates the Project site as Resort (R) and Open Space (OS). The R designation allows commercial mixed uses including visitor lodging, amenities and services, and workforce housing.

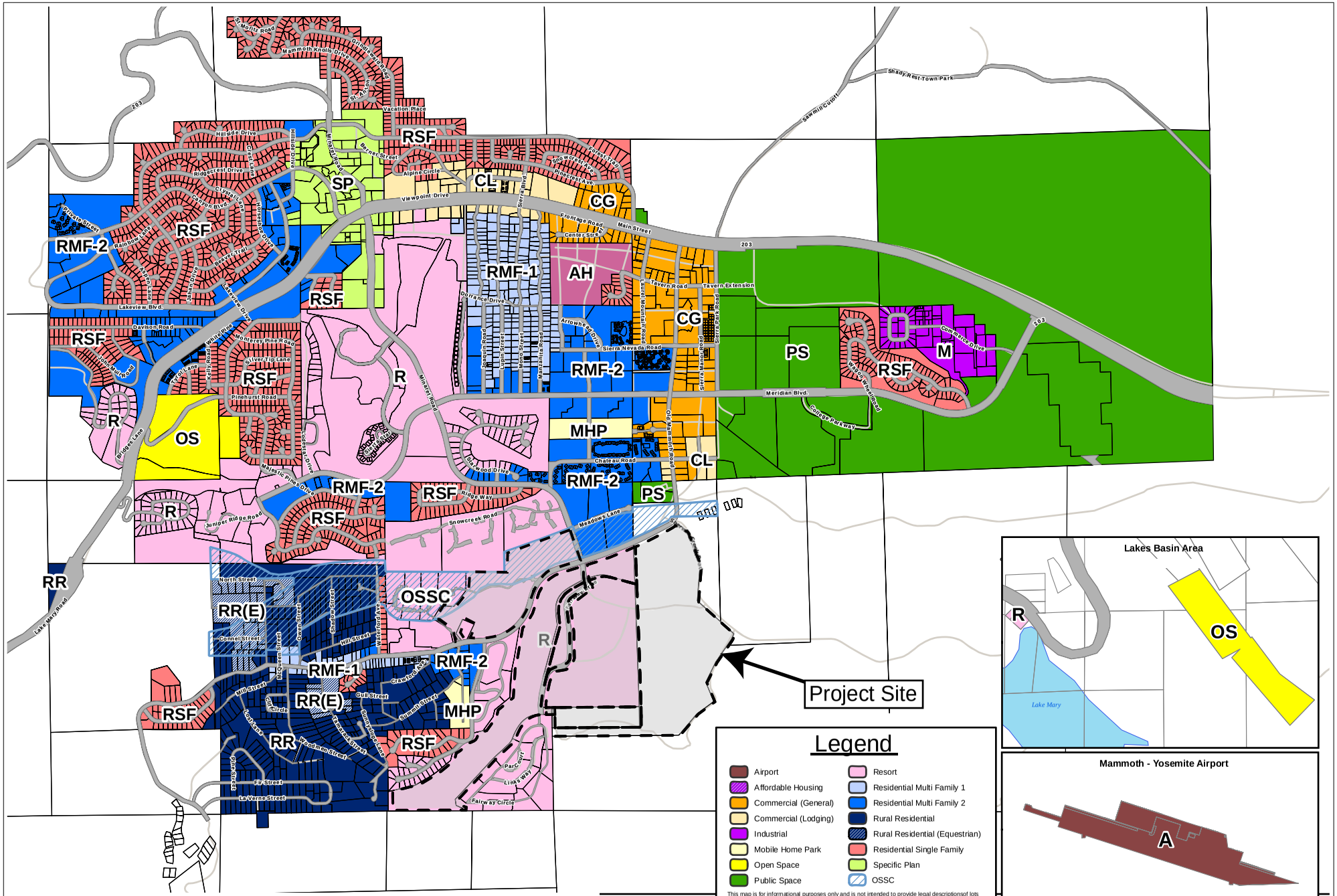
The Resort (R) designation is generally applied to large parcels capable of providing a complete resort experience as found in the Snowcreek, Sierra Star and Juniper Ridge resort areas of the Town. A Resort development should provide mixed uses consistent with a mountain resort experience, offering distinctive services and activities. The development should be planned with activities appropriate for the area, which may include visitor lodging, recreational amenities, commercial services that support the resort atmosphere, meeting spaces, transit facilities and interconnections to the community's and public trail systems. The design of the area should assure a functional and distinctive pedestrian-scaled environment that will encourage visitors to return to the Town. New developments should be physically connected internally and to all primary visitor-oriented destinations with an integrated system of streets, sidewalks, and recreational paths. Most Resort development projects are required to provide commercial support within their development area. Resort projects must also demonstrate consistency with the overall community goals and sufficient amenities to make the projects attractions in their own right. Lot coverage is limited to a maximum of 50 percent overall to provide space for outdoor recreation amenities. In addition, workforce housing is allowed within the major resort developments. The density range for

the R designation is six to eight dwelling units per acre. Densities may be clustered within individual Resort developments. Residential density may be increased pursuant to state law.

According to section 17.28.490 of the Town's Municipal Code, the OSSC protection zone does not prohibit or restrict development. The OS designation is applied to lands that have significant recreational or environmental values and permits development of facilities that support the environmental and recreational objectives of the community. The OS zone may include environmentally sensitive areas such as wetlands, floodplains, and streams and may include recreation facilities such as parks, athletic fields, golf courses, and community gathering spaces. In addition, the OS designation includes the proposed second nine-holes of the Snowcreek golf course and Town properties along Mammoth Creek. As previously discussed, the area designated as Open Space on the Project site was transferred to private ownership in the 2005 Land Exchange between the United States Forest Service (USFS) and Snowcreek Investment Company in order to acquire enough land for a nine-hole addition to create an 18-hole golf course. After the 2005 Land Exchange, Snowcreek Investment Company entered into a covenant with the Town that protected the exchange parcel from being developed with residential housing, commercial lodging, transient occupancy, and being further subdivided as this land is outside of the Town's Urban Growth Boundary (UGB). The covenant was initiated as a part of the 2005 Land Exchange process and is monitored by the Eastern Sierra Land Trust. The conditions of the land exchange covenant and land use designations are described in further detail in the section III (Project Description) and section IV.H (Land Use & Planning) of this Draft EIR.

Surrounding Land Uses

The Project site is primarily bounded to the east by the privately owned Sierra Meadows Ranch, to the south and east by USFS land (i.e., Inyo National Forest) that is heavily used for both summer and winter recreation activities and to the north and west by completed Snowcreek development and other residential developments. Surrounding land use zoning includes Residential Single Family (RSF), Mobile Home Park (MHP), Residential Multi-Family 2 (RMF-2), Resort (R), Open Space (OS) and Open Space Stream Corridor (OSSC) (refer to Figure II-4 through Figure II-9).


RSF
SP
CL
CG
RMF-2
RMF-1
AH
R
PS
M
MHP
OS
OSSC
RR
RR(E)
Project Site
Lakes Basin Area
Lake Mary
Mammoth - Yosemite Airport
A
Legend
Airport
Affordable Housing
Commercial (General)
Commercial (Lodging)
Industrial
Mobile Home Park
Open Space
Public Space
Resort
Residential Multi Family 1
Residential Multi Family 2
Rural Residential
Rural Residential (Equestrian)
Residential Single Family
Specific Plan
OSSC
This map is for informational purposes only and is not intended to provide legal descriptionsof lots or other physical features. Any information on this map is subject to change without notice at any time.
Main Street
Meridian Blvd.
Viewpoint Drive
Lake Mary Road
Minaret Road
Meadows Lane
Snowcreek Road
Juniper Ridge Road
Ridge Way
Chateau Road
Sierra Nevada Road
Tavern Road
Tavern Extension
College Parkway
Shady Rest Town Park
Sawmill Circle
Lakeview Blvd.
Davison Road
Pinehurst Road
Majestic Pines Drive
Old Mammoth Road
Sierra Park Road
Frontage Road
Center Street
Alpine Circle
Vacation Place
Hillside Drive
Ridge Street Drive
Mammoth Knolls Drive
Mono Street
Berner Street
Forest Trail
Canyon Boulevard
Rainbow Lane
Aspen Lane
Lakeview Drive
Davison Road
White Fir Lane
Kelly Road
Mono Road
Silver Tip Lane
Bridges Lane
Majestic Pines Drive
Pinehurst Road
Juniper Ridge Road
Old Mammoth Road
Sierra Nevada Road
Chateau Road
Meadows Lane
Snowcreek Road
Ridge Way
Sierra Park Road
Sierra Nevada Road
Arrowhead Drive
Tavern Road
Tavern Extension
Meridian Blvd.
College Parkway
Conness Drive
Wilson Meadow Road
Lake Mary Road
North Street
Chapin Street
Green Street
Hill Street
Waterford Avenue
McQueen Street
Crawford Ave
Mill Street
Gull Circle
Gull Circle
Summit Street
Summit Ridge Lane
Foothill Circle
Foothill Lane
Woodmen Street
Francis Ann Street
Pine Ridge Street
Ft Street
La Verne Street
Parc Court
Links Way
Fairway Circle
Source: Town of Mammoth Lakes Zoning Designations, August, 2006; CAJA, January 2007.
CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research
NORTH
0 1000 2000 3000 4000
Scale (Feet)
Figure II-4
Zoning Map

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View 1: View of Project site facing south from Old Mammoth Road. View shows existing driving range in foreground and Sherwin Mountain Range in background.

View 2: View of Project site facing southwest from the Old Mammoth Road/Sherwin Creek Road intersection.

View 3: View of Project site facing west from land exchange parcel off Sherwin Creek Road.

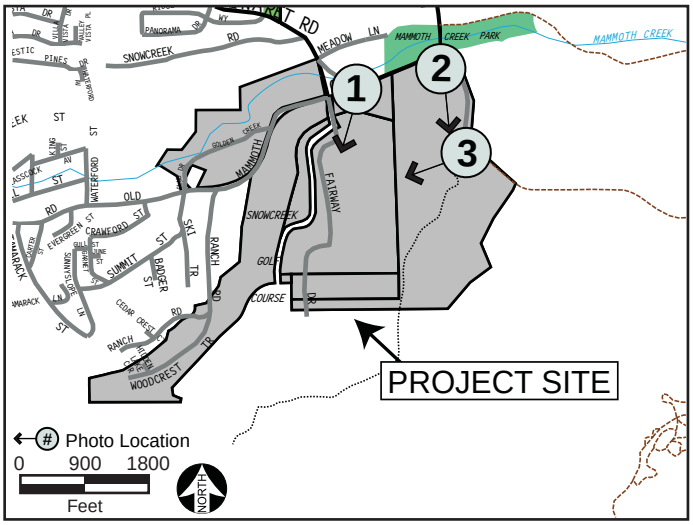

PHOTO LOCATION MAP

Source: Christopher A. Joseph & Associates, 2006.

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Environmental Planning and Research

Figure II-5
Views of the Project Site A
Views 1, 2 and 3

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View 4: View of Project site facing southwest from land exchange parcel.

View 5: View of Project site facing northwest from the Old Mammoth Road/Minaret Road intersection.

View 6: View of Project site facing west from Minaret Road.

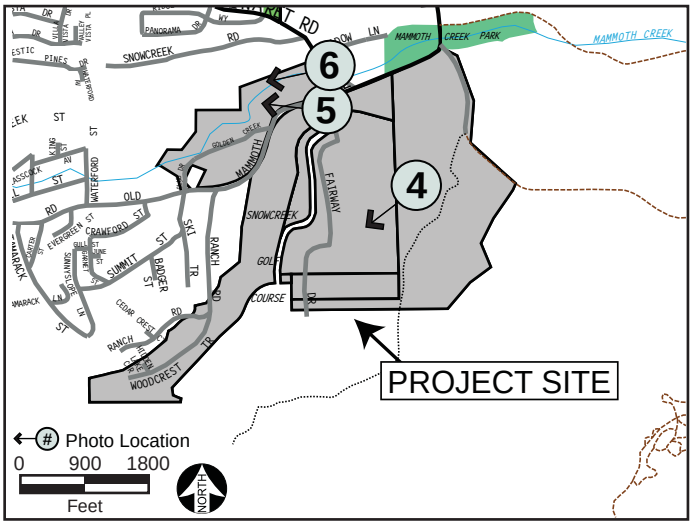

PHOTO LOCATION MAP

Source: Christopher A. Joseph & Associates, 2006.

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Environmental Planning and Research

Figure II-6
Views of the Project Site B
Views 4, 5 and 6

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View 7: View of residential land use on Old Mammoth Road north of Project site.

View 8: View of The Sherwins on Sherwin Creek Road southeast of Project site with the Project site in the foreground.

View 9: View of residential land use on Fairway Drive south of the Project site.

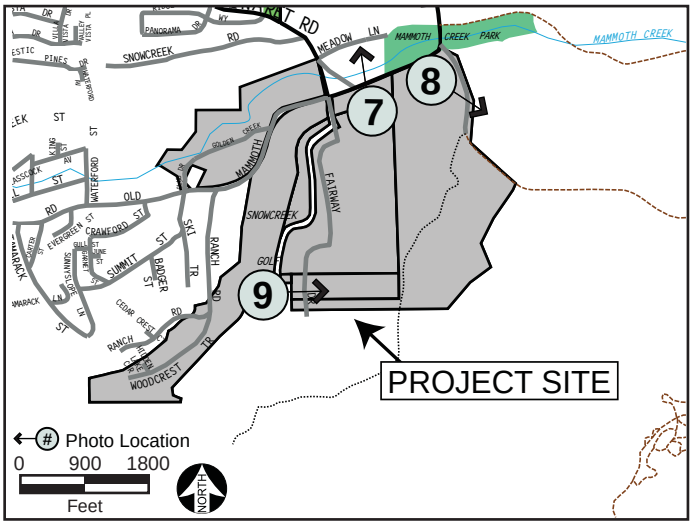

PHOTO LOCATION MAP

Source: Christopher A. Joseph & Associates, 2006.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure II-7
Views of Surrounding Uses A
Views 7, 8 and 9

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View 10: View of residential land use on Ski Trail Road southwest of the Project site.

View 11: View of residential land use on Ski Trail Road west of the Project site.

View 12: View of residential land uses west and south of Project site with views of the existing nine-hole golf course on the Project site.

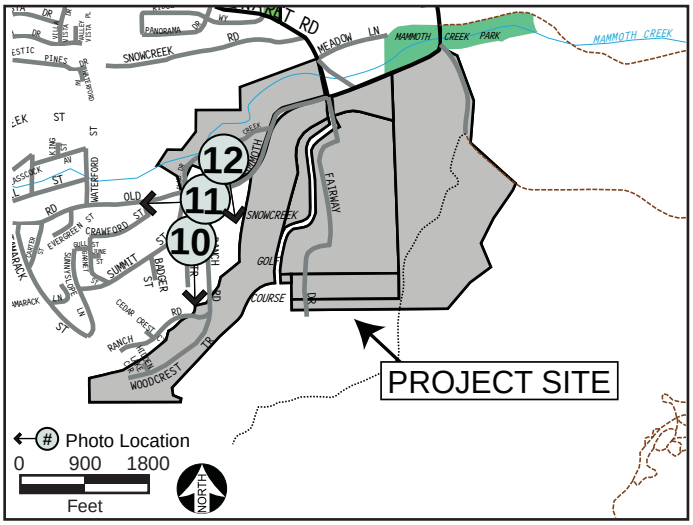

PHOTO LOCATION MAP

Source: Christopher A. Joseph & Associates, 2006.

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Environmental Planning and Research

Figure II-8
Views of Surrounding Uses B
Views 10, 11 and 12

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View 13: View of the Historic Knight Wheel located on Old Mammoth Road north and west of the Project site.

View 14: View of residential land uses east and north of the Project site on Minaret Road.

View 15: View of undeveloped lot at the Old Mammoth Road/Minaret Intersection located north and east of the Project site.

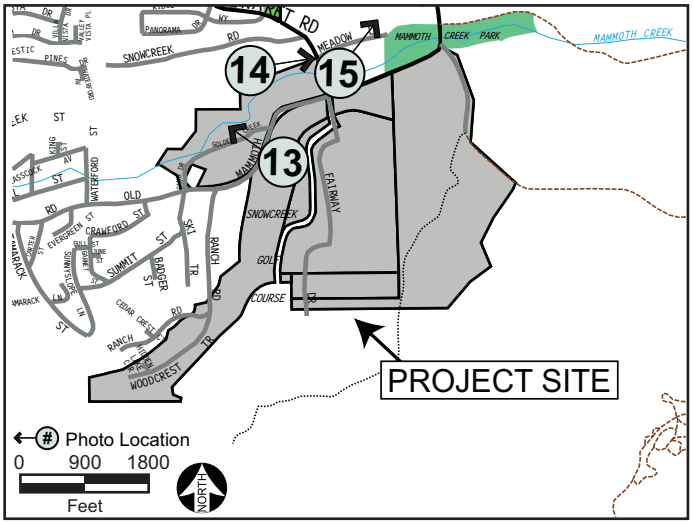

PHOTO LOCATION MAP

Source: Christopher A. Joseph & Associates, 2006.

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C. RELATED PROJECTS

Sections 15126 and 15130 of the State *California Environmental Quality Act* (CEQA) *Guidelines* provide that Environmental Impact Reports (EIRs) consider the significant environmental effects of a proposed project as well as "cumulative impacts." Cumulative impacts refer to two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts (*CEQA Guidelines* Section 15355). Cumulative impacts may be analyzed by considering a list of past, present, and probable future projects producing related or cumulative impacts [*CEQA Guidelines* Section 15130(b)(1)(A)].

All related projects (i.e., those projects with pending applications, recently approved, under construction, or reasonably foreseeable projects at the time of the Notice of Preparation (NOP) on October 19, 2006 that could produce a related or cumulative impact on the local environment when considered in conjunction with the proposed project) are included in the cumulative impact analyses in this EIR. While the related project list is generally considered adequate at the time of the NOP, this related projects list was generated from current information provided by the Town on December 31, 2006. These projects can include, if necessary, projects outside of the control of the Lead Agency or, a summary of projections contained in an adopted or certified general plan or related planning document which describes or evaluates regional or area-wide conditions contributing to the cumulative impact. For an analysis of the cumulative impacts associated with these related projects and the proposed project, the reader is referred to the cumulative impact discussions under each individual impact category in Chapter IV.

Table II-1 lists the related projects identified for the proposed project. These related projects consist of all approved, proposed, or projects currently under construction located in the Town of Mammoth Lakes (refer to Figure II-10). The list includes projects of various land uses, including Low-Density Residential, High-Density Residential, Commercial, Institutional Public Resort, Industrial and the North Village Specific Plan.

Table II-1
Related Projects

Number	Project Applicant & Description	Location	Land Use	Size
1	**Snowcreek VI, The Lodges** 106 unit multi-family development	40-130-01, -02, -03 Ranch Road	HDR - R	106 units
2	**Mono County Library** A new library is under construction.	35-010-32 Meridian Boulevard & Sierra Park Road	IP – PS	16,000 sf
3	**Mammoth Hospital** Expansion to existing hospital	35-010-29 185 Sierra Park Road	IP – PS	40,000 sf
4	**Mammoth View, Eva Hill, Acorn Asset Management** 198-Unit Private Residence Club (92 units) and Condo Hotel (106 units) project on the former 5.5-acre Swiss Chalet site.	33-082-07, -09, -10, -11 Main Street	HDR – CL	198 units

Table II-1
Related Projects

Number	Project Applicant & Description	Location	Land Use	Size
5	**Darin Davis, Mammoth Gateway** 11 unit condominium (10 market rate, 1 affordable)	33-110-11, -12 3771 Main Street	HDR – CL	11 units
6	**Sean Combs – 8050 A and B/ Coast Pacific** 23 unit multi-family residential condominiums	33-044-1133-044-04 Canyon Boulevard	V – SP	23 units
7	**The Grove / Minaret Acquistion Co. LLC** 32 fractional, single family residences and 10 condominium units on a 3.1 acre lot. The lot is within the North Village Specific Plan area and is zoned Specialty Lodging	33-100-37 5781 Minaret Rd.	SP	42 units
8	**Stonegate Mammoth, Elliott Brainard** Phase 1: 14 single family residential units	33-100-43 5808 Minaret Road 33-100-26, -41 Minaret Road	LDR -1 – SP	14 units
9	**Monache/Westin** A condominium hotel with 230 dwelling units, related service functions, and recreational facilities; a parking structure with 236 spaces; 4,000 sf public restaurant	33-020-3137 50 Hillside Drive	SP	230 units 4,000 sf
10	**Grey Eagle 2, John Hooper** 12 units within 6 buildings	35-025-05 Mountain Boulevard	HDR – CL	12 units
11	**Solstice/Intrawest Sierra Star Development** 58 residential condominium units within 9 structures	33-330-54, -56, -57 Sierra Star Parkway	R	58 units
12	**Tallus, Eric Fishburn** 19 single family residences, fractional use. 60 units of density sold within the Sierra Star Master Plan Area	33-170-03, -04, -05, 33-370-01 through -21 Obsidian Place 33-330-51 Obsidian Place	LDR -1 – R	19 units
13	**Aspen Village Phase 1& 2/ Mammoth Lakes Family Associates** Phase 1: affordable housing project with 48 units and a community center**.** Phase 2: 24 "townhome" condominium units on a 1-acre site. Project is located adjacent to (behind) workforce housing units.	Phase 1: 40-040-36, -38 1616-1700 Old Mammoth Road Phase 2: 40-040-39 1616 Old Mammoth Road	HDR – R	72 units
14	**Meridian Court/ Mammoth Lakes Housing** 24 workforce housing units. Conditional Cert. of Occupancy issued at the end of May.	33-160-82 504 Mono Street	HDR – RMF-2	24 units
15	**Lodestar / Mammoth Lodestar LLC Mammoth Crossing/ Western Resort Properties** 45 residential-unit condominium units with quarter share fractional ownership, an amendment to the Lodestar Master Plan regarding height and setbacks.	33-330-47 5862 Minaret Road	HDR – R	45 units
16	**Intrawest & Mammoth Lakes Housing, Inc.** Tentative Tract Map and Use Permit Application to subdivide a 2.49-acre site within Planning Area 4B/4E4 of the Lodestar Master Plan into 40 residential condominium units within 7 structures for workforce housing	33-330-44, -50 Minaret Road	HDR – R	40 units

Table II-1
Related Projects

Number	Project Applicant & Description	Location	Land Use	Size
17	**The Woodwinds/Sierra Star Four-Five Development Company** The 3.58-acre site is proposed to be developed with 28 townhome condominium units within 8 structures. Buildings 1 and 6 are two 3-bedroom unit structures with each unit having a two-car garage. Buildings 2, 3, 4, 5, 7 and 8 are four 3-bedroom unit structures with two of the units having a 2-car garage and two of the units having a 1-car garage.	33-330-55 Sierra Star Parkway	R	28 units
18	**Mammoth 8050-C** 21 fractional-share condominium ownership units and 76 understructure parking spaces. The units are to be maintained as a private residence club.	33-044-11 50 Canyon Boulevard	SP	21 units
19	**Storied Places/Mammoth Bridges Development** Request to develop 22 fractional ownership condominium units on a 3.2-acre site.	31-010-14 888 Bridges Lane	HDR – R	22 units
20	**South Hotel "The One"/S. Minaret Development Co.** Request for approval of the "South Hotel" in the East Village (Phase 2) of the Village at Mammoth. The project is a 251 unit condominium "flag" hotel with spa and pool facilities, meeting rooms, two retail units along Minaret Road, and a two-level understructure parking garage with 211 spaces.	333-043-05, -06, -15, -16 Minaret Road	HDR – SP	251 units
21	**Mammoth Hillside-Canyon Boulevard 8050/Mammoth Hillside LLC** Phase I approval of a mixed-use, 193-unit condominium hotel in the North Village Specific Plan area (west side of Canyon Boulevard above Lake Mary Road). The project includes 30 townhome condominiums (Phase II), conference facilities, restaurant, spa, and understructure parking garage with 260 spaces on approximately a 7-acre site.	31-110-2726, -27, 33-010-02, 32-020-10, -11, -21, -3133 Canyon Boulevard	SP	193 units
22	**Eagle Lodge-Juniper Ridge/Mammoth Mountain Ski Area (MMSA)** Request to amend the Juniper Ridge Master Plan to include the Eagle Lodge development. Eagle Lodge is a mixed-use skier day lodge, commercial, and residential development located on a 3.81-acre site. The plan would allow 180 dwellings, understructure parking facility (190 spaces), a small open ice rink, conference rooms, and a convenience market.	32-040-08, -12 4000 Meridian Boulevard	HDR – R	180 units 21,000 sf
23	**Snowcreek VII: Hilltop/Snowcreek Investment Company** Snowcreek VII, a multi-family residential project with 118 condominiums within 36 buildings, 6 duplexes, 14 triplexes, and 16 four-plexes. The site is 38.55 acres.	40-040-20 85 and 1254 Old Mammoth Road	HDR – R	118 units
24	**Holiday Haus/Ward Jones** 74-unit hotel on the existing Holiday Haus site (redevelopment)	33-110-01, -02 3863 and 3905 Main Street	HDR – CL	74 units
25	**Manzanita Apts. / Mammoth Lakes Housing** 14 unit workforce housing community on the corner of Manzanita and the frontage rd south of Main Street	33-124-03, -04 3477 Main Street, 32 Manzanita Road	HDR	14 units
26	**Clearwater Mammoth** Mixed-use project; 339 units with 480 rooms, 28,205 sf of commercial and 33 3-bedroom units of workforce housing.	35-230-05, 06, 07 164, 202, 248 Old Mammoth Road	HDR – CG	339 units 28,205 sf

Table II-1
Related Projects

Number	Project Applicant & Description	Location	Land Use	Size
27	**Tavern Road Park-N-Ride / Mammoth Lakes Housing, Inc.** 31 affordable apartments, commercial space, and a parking garage on the existing Park-N-Ride.	35-180-12 105 Old Mammoth Road	C	31 units
28	**Mammoth Lakes Foundation** Student Housing - Construct 74 studio and 1-bedroom dormitory units within two, 2-story structure for college housing with 102 understructure parking spaces in three phases. The project includes a connecting building with a 2-bedroom manager's unit.	35-010-46 1500 College Parkway	HDR	75 units
29	**Hidden Creek Crossing/ Shady Rest** 25 acre forested site; 460 residential units (100 affordable, 100 workforce, 260 market rate) and 31,000 square feet of commercial space.	35-010-20	HDR – AH	460 units 31,000 sf
30	**Sierra Star Master Plan (SSMP) / Intrawest** SSMP proposes to revise the existing Lodestar Master Plan to refocus the remaining development within the area towards the creation of transient occupancy units, additional affordable housing, mixed-use resort with a total of 1,251 units including the currently 451 developed units within the Master Plan area. A maximum of 29,000 sf of commercial and 30,000 sf of conference center would be permitted with a 5-star hotel proposed for Planning Area 5 near "Bear Lake." The revised plan proposes to construct a hotel within Planning Area 5 with a building footprint of 72,000 SF. The proposed building is stepped in height with 33% at a maximum height of 200 feet, 30% at 160 feet, 15% at 140 feet, and 22% at 65 feet. Setbacks and coverage are similar to current zone standards. Parking requirements would be based on use: Hotels needs .75 spaces per key plus 1 space per 20 keys. Resort Condo: 1 space / unit plus 1 space per 10 units.	Lodestar / Sierra Star Master Plan Area	R	800 units 29,000 sf com. 30,000 sf confer.
31	**The Jeffreys / Mammoth Lakes Housing** 14 unit affordable housing apartment community with an additional 2 units in an existing duplex.	33-150-07, 08 312 and 336 Lupin Street	HDR – RMF-1	14 units
32	**Town of Mammoth Lakes** Municipal parking garage consisting of 340 parking spaces	33-020-36 99 Canyon Boulevard	IP	340 parking spaces
33	**Cardinal Investments (The Sherwin)** 120 unit condominium hotel for property located at the northeast corner of Old Mammoth Road and Minaret Road.	40-020-01 Meadows Lane	RMF-2	120 units
34	**Gaylon Teslaa** Veterinary Hospital with accessory animal boarding for a maximum of 12 dogs within the Old Blondies Restaurant Building.	33-122-10 3599 Main Street	C	3,600 sf
35	**Turner Gas Tank Farm**	40-14-004	R-OS	10,393 sf
36	**Stephen Ettinger** 10 Condominium units in 5 buildings	22-242-14 2144 Old Mammoth Road	HDR - RMF-1	10 units
37	**Richard Ronning** Condo conversion of exiting storage units in the Industrial Park.	37-200-51 314 Commerce Drive	I	10 units

Table II-1
Related Projects

Number	Project Applicant & Description	Location	Land Use	Size
38	**Mammoth Mountain Ski Area** Temporary stressed membrane structure for ski school facility at the base of Chair 15.	32-040-10, 21-140-10 3256 Meridian Blvd.	R	3,400 sf
39	**Intrastar Mammoth LLC** 10 Townhome Condominium units within Planning Area 2 of the Lodestar Master Plan.	33-330-50 5300 Minaret Road	R	10 units
40	**Mammoth Lakes Fire Protection District** Demolition of old station and construction of new station; Under Construction	35-010-12 3150 Main Street	IP – PS	17,600 sf
41	**Tihana Town Homes LLC** Residential PUD consisting of 10 single family residential units in the form of five buildings containing two attached single family residences each. Eight 1-bedroom and two 3-bedroom units	33-122-08 48 Lupin Street	RMF-1	10 units
			Total Units	3,674
			Total Square Footage	235,098

Land Use Key:
sf = square feet
LDR-1 = Low-Density Residential 1
LDR-2 = Low-Density Residential 2
HDR-1 = High-Density Residential 1
HDR-2 = High-Density Residential 2
RSF = Residential Single Family
RMF = Residential Multi-Family
RR = Rural Residential
C = Commercial
CG = Commercial General
IP = Institutional Public
R = Resort
I = Industrial
NVSP = North Village Specific Plan

Source: Town of Mammoth Lakes Development Tracking, Jen Daugherty, Assistant Planner, December 2006 and July 2007.

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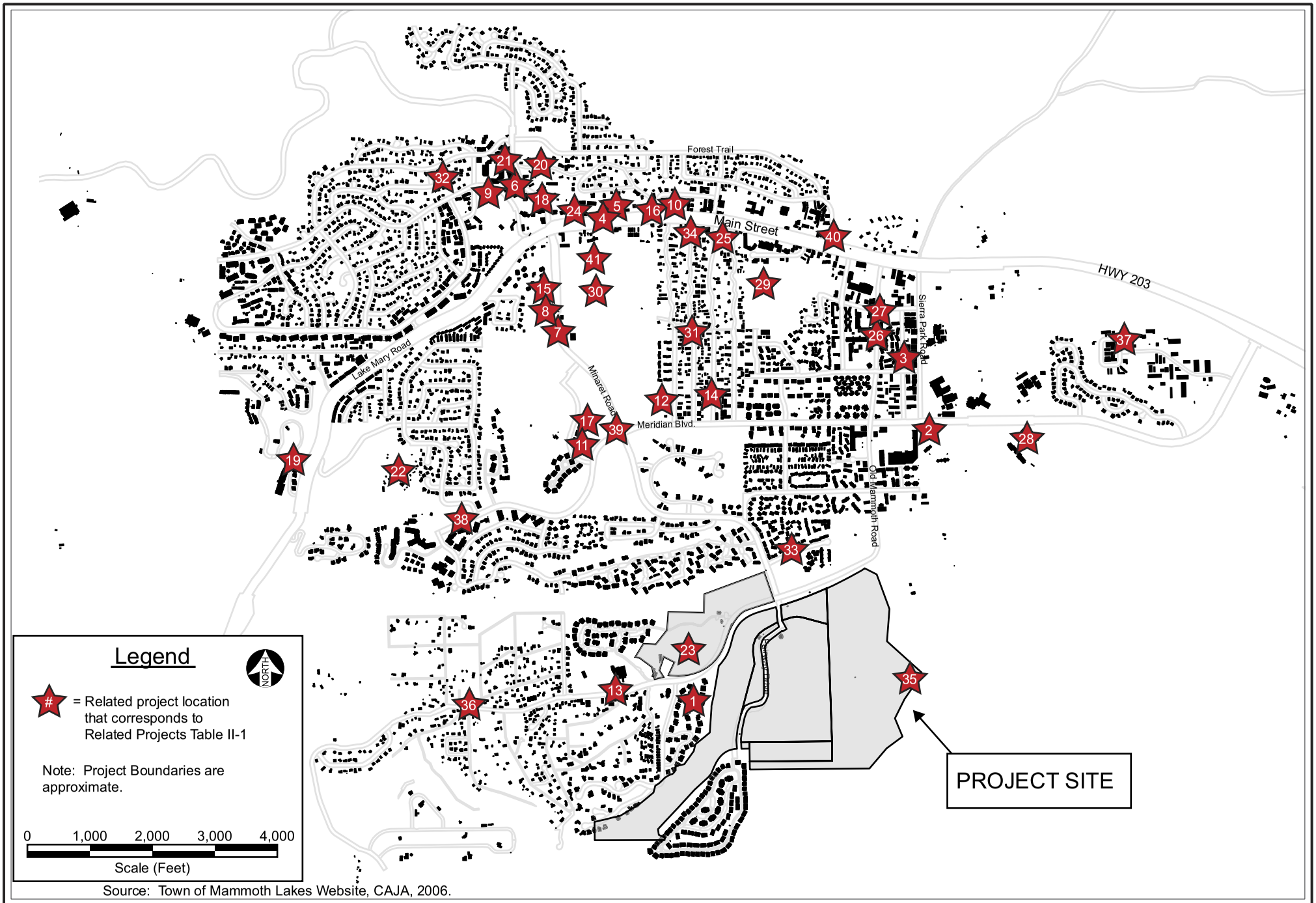

Source: Town of Mammoth Lakes Website, CAJA, 2006.

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Environmental Planning and Research

Figure II-10
Related Projects Map

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III. PROJECT DESCRIPTION

A. PROJECT APPLICANT

The Project applicant for the proposed Snowcreek VIII, Snowcreek Master Plan Update - 2007 Project (Project) is:

Snowcreek Investment Company L.P.
Charles R. Lande, President
PO Box 100 PMB 605
Mammoth Lakes, CA 93546

B. PROJECT CHARACTERISTICS

The Project is intended to complete a 30-year Master Plan, providing amenities and activities for local residents, visitors and owners. The Project consists of adoption by the Town of Mammoth Lakes (Town) of the Snowcreek VIII, Snowcreek Master Plan Update - 2007 (2007 Master Plan). The 2007 Master Plan proposes revisions to the Updated Master Plan for Snowcreek at Mammoth (1981 Master Plan), which was an update of the original Snowcreek Master Plan (1974 Master Plan). The 2007 Master Plan or Project proposes standards for buildout of the remaining Snowcreek Master Plan area (development area that is also referred to as "Snowcreek VIII") and is intended to fulfill the vision of the previously approved 1974 Master Plan and current 1981 Master Plan (refer to Table III-1).

It has been over 25 years since the last update of the Snowcreek Master Plan, and quite naturally, important changes have occurred, which have had significant effects on the Project. The Project incorporates shifts in emphasis based upon recent resort trends and local conditions as well as revisions to the final phase or phases of the 1981 Master Plan.

The Project consists of the following land uses, which are discussed in detail further in this section.

- Market/General Store (Store) and a Natural Resources and Historic Interpretive Center (Interpretive Center)
- 400-room/suite luxury Hotel (Hotel) and Private Residence Club (PRC)/suite units, including conference facilities, restaurant/lounge, retail shops, fitness center, full service public spa and public ice skating pond
- 850 residential units providing ownership and longer term rental opportunities in a resort setting
- Resident's Club with pool, spa, fitness facility, kitchen/outdoor barbeque facilities, vacation rental office, and snack bar

- Expansion of nine-hole golf course into a championship 18-hole course, including Golf Pro Shop

- Outfitters' Cabin with outdoor equipment rental and sales, and trailhead access to public lands of the Inyo National Forest in the Sherwin Range

The Project being evaluated in this Draft EIR pertains only to the remaining portion of the current 1981 Master Plan development areas. The Project does not include the existing/entitled Snowcreek Master Plan in which development has either already occurred or is currently in progress. The existing/entitled developments include the residential areas of Snowcreek I through VII, the Snowcreek Athletic Club, the Catholic Church, the Mammoth Lakes Fire Protection District (MLFPD) Fire Station 2, Aspen Village Workforce Housing, the Mammoth Community Water District (MCWD) Wastewater Treatment Plant and the existing privately owned publicly accessible nine-hole golf course (refer to Table III-1). While the nine-hole golf course is considered an existing feature, the environmental impacts related to merging it with undeveloped land to create a privately owned publicly accessible 18-hole course is considered part of the Project. Reconfiguration could include modification to the irrigation system or increasing native vegetation in the "rough." However, major recontouring and reconfiguration of the existing nine-hole course is not anticipated.

This section provides a detailed description of the proposed resort, recreation, retail and public amenities components to be developed on the approximate 237-acre Project site (refer to Table III-2). Figures III-1 and III-2 represent the land use development of the approved Master Plans and the proposed land use development of the Project, respectively.

Table III-1
Development Areas of the 1974 and 1981 Master Plans

Development Area by Year Developed/Entitled	Dwelling Units (DU)
Original 1974 Snowcreek Master Plan	
1978 - Snowcreek I	107
1979 - Snowcreek II	123
1979 - Snowcreek Athletic Club	
1982 - Snowcreek III	86
Existing 1981 Updated Master Plan for Snowcreek at Mammoth	
1986 - Snowcreek IV	138
1987 - The Ranch	19
1988 - Snowcreek Crest	58
1988 - MCWD Wastewater Treatment Plant	
1989 - MLFPD Fire Station 2	
1990 - Snowcreek V-1	150
1991 - Nine-hole Golf Course	
1992 - Fairway Ranch	
1992 - Catholic Church	
1997 - Snowcreek V-2	144
2004 - Snowcreek VI	106
2004 - Aspen Village	72[(1)]
2006 - Snowcreek VII	118
Master Plan Build-Out To Date	**1,145[(2)]**
Total Master Plan Units Allotted	**2,368**
Total Master Plan Units Remaining	**1,223[(3)]**
Total Non-Residential Square Footage Remaining	**150,000**

Notes:
(1) Aspen Village has two phases; 48 unit phase and 24 unit phase for a total of 72 units.
(2) Developed, entitled and/or currently under construction
(3) Totals remaining exceed amount proposed under the Project (i.e., 237 acres, 75,000 sf non-residential space, and 1,050 residential units.
Sources: 1974 and 1981 Snowcreek Master Plan EIRs, Town of Mammoth Lakes Department of Community Development, and Snowcreek Resort Conceptual Plan, December 2006.

Table III-2
Proposed 2007 Master Plan

Development Area	Square Feet	Dwelling Units (DU)
Non-Residential Space		
Commercial Retail		
Market/General Store	3,500	
Hotel		
Spa/Wellness Center	12,900	
Retail	10,000	
Restaurant/Bar/Lounge	10,000	
Conference & Meeting Space	25,000	
Golf Pro Shop	3,000	
Activities		
Natural Resources and Historic Interpretive Center	900	
Resident's Club/Management Offices	8,000	
Recreation		
18-Hole Golf Course		
Outfitters' Cabin	1,700	
Total 2007 Master Plan Non-Residential Space	**75,000[4]**	
Residential/Condo/Hotel Unit Space		
Hotel Rooms/Suites	212,500	125[1]
Private Residence Club (PRC)/suite units	127,500	75[1]
Back of the House/Hotel Operations	100,225	
Homes (Residential Condo)		850[2]
Total 2007 Master Plan Residential Space	**440,225**	**1,050**
Total 2007 Master Plan		**1,050**
Total 1974 and 1981 Master Plans Already Built/Entitled		**1,145[3]**
Proposed Master Plan Build-Out		**2,195**

Notes:

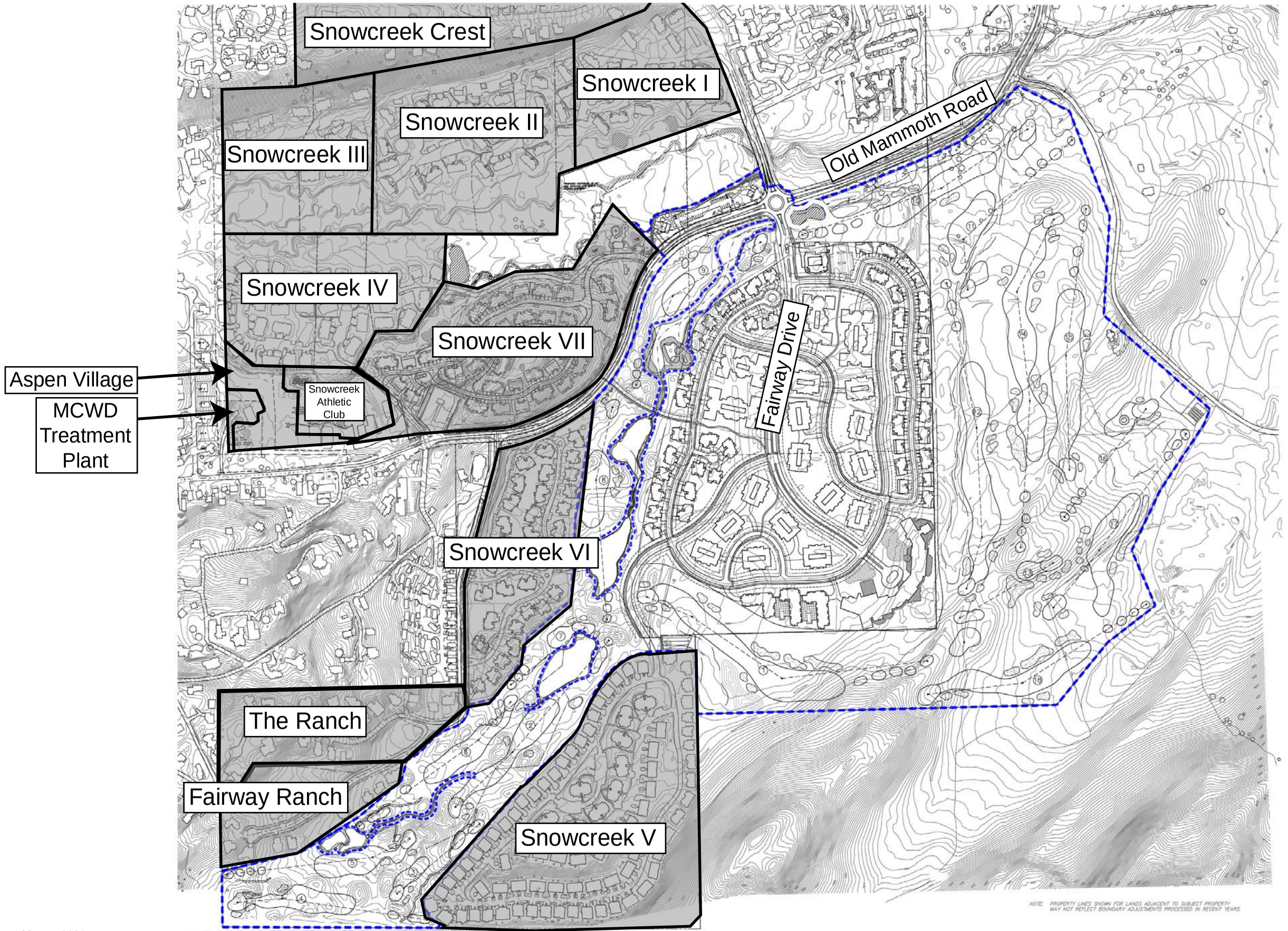
(1) Hotel would accommodate 250 guest rooms/suites (125 dwelling units) and 150 Private Residence Club (PRC) suites (75 dwelling units); total 400 rooms/suites. Under Town Municipal Code a hotel room/suite or private residence room equals ½ of a unit, thus the 400 Hotel rooms/suites equates to 200 dwelling units.

(2) Homes built under the 2007 Master Plan are comprised of High Density Stacked Flats, Medium Density Stacked Flats and Townhomes, and Low Density Stacked Flats and Townhomes. Of the 850 units, 80 are designated as workforce units for purchase. The remainder of the workforce housing obligation will be satisfied off site.

(3) Total built or entitled

(4) Specific square footage numbers are estimated and serve to study a maximum non-residential square footage of 75,000 square feet. All of Project will be parked per Town Municipal Code, or exceeding the Town Municipal Code.

Sources: 1974, 1981 and 2007 Snowcreek Master Plans, and the Town of Mammoth Lakes Department of Community Development, December 2006.



Source: Scheurer Architects, 2006.

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NORTH

0 250 500 750 1000
Scale (Feet)

Figure III-1
Developed or Under Construction Areas for
Snowcreek Master Plan

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Source: Scheurer Architects, 2006.

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0 250 500 750 1000
Scale (Feet)

Figure III-2
Proposed New Development Areas
for the 2007 Master Plan

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Site History

1974 Snowcreek Master Plan

Dempsey Construction Corporation, the original developer of Snowcreek, began construction in the area in the late 1970s of the project contemplated by the Snowcreek Master Plan. The Snowcreek Master Plan proposed 2,400 dwelling units on 355 acres (a gross residential density of 6.76 units per acre),[1] 150,000 square feet of commercial space and a one-acre service station site. Three development phases were eventually completed under the 1974 Master Plan consisting of approximately 13 percent[2] of the total number of residential units planned for the Project (refer to Table III-1 and Figure III-1). The 1974 Master Plan included a 40-acre parcel at the southern edge of the property which was traded to the United States Forest Service (USFS) in exchange for a 30-acre parcel,[3] two school sites and one Town site.

1981 Snowcreek Master Plan

In 1981, Dempsey Construction Corporation proposed an updated Snowcreek Master Plan. The 1981 Master Plan reduced the number of proposed dwelling units from 2,400 to 2,332, which, in light of the reduced acreage, had the effect of maintaining the Project density at the same 6.76 units per acre approved in the 1974 Master Plan (refer to Table III-1). In addition, the 1981 Master Plan included the following changes:

- 2 acres designated as a Catholic church site
- 4.1 acres designated for employee housing
- A site designated for the Snowcreek Athletic Club
- An area designated for the first nine-holes of the Snowcreek Golf Course
- Old Mammoth Road was realigned to alleviate hazardous driving conditions
- A roadway was added to provide access to Snowcreek V

The environmental impacts of the proposed 1981 Master Plan were studied in an EIR. The 1981 EIR emphasized that increased densities were not being requested, and that the mitigation measures adopted in

---

[1] *This consisted of 1,950 residential units, 300 condominium-hotel units and 150 motor inn units.*

[2] *This percentage was calculated by dividing the 316 unit developed in the first three phases of the 1974 Master Plan by the 1,950 residential units, 300 condominium-hotel units and 150 motor inn units proposed at that time (316/2400 = 0.1366)*

[3] *The 30-acre parcel is identified as Development Area 10 in the 1981 Master Plan (Figure 1).*

the 1974 EIR to protect environmentally sensitive meadow lands along Mammoth Creek would remain in place.

After the EIR was approved, the Dempsey Construction Corporation entered into a Development Agreement with Mono County in 1982. A Development Agreement (DA) is a contract between a local government unit (LGU) and a developer. A DA provides security to both parties. The DA provides the LGU with a legally binding document that the developer would provide infrastructure and/or pay fees required by a new project. The DA provides the developer with a legally binding document that they can build the project even if the LGU passes a growth-control initiative.

Mono County (County) entered into the DA because the County found that the 1974 Master Plan would result in the creation of a physical environment that would "…conform to and complement the goals of the community, providing housing, recreational and passive open space, sites for schools and religious worship, create an environment sensitive to human needs and values, and would protect adjacent land uses from adverse impacts." In addition, the County found that the 1974 Master Plan would be "…in the best interests of the County and would provide for orderly growth and development of the area consistent with the County's planning goals and objectives."

The DA required public works improvements, utilities and facilities, and was valid for 20 years. When the Town incorporated in 1984, the Town accepted and adopted the DA (Resolution #84-50). The terms of the DA were not extended after 20 years, thus the DA expired in 2002.

The 1981 Master Plan added essential public uses, including 0.91 acres of land for the construction of the MLFPD's Fire Station Number 2 and 1.53 acres for the MCWD Wastewater Treatment Plant. These properties were made available to the MLFPD and the MCWD.

Approval of the 1981 Master Plan allowed for the construction of a total of 2,332 dwelling units plus the workforce housing density bonus which increased the total number of units allowed to 2,368. To date, 1,145 have been constructed or are under construction with 1,223 units remaining (refer to Table III-2 and Figure III-1). Subsequent to the approval of the 1981 Master Plan, the workforce housing site was relocated to the west of the Snowcreek Athletic Club and approval of a 4.87 acre project in that area was made.

2005 Land Exchange

In 2005, a land exchange (2005 Land Exchange) was completed between the United States Forest Service (USFS) and Snowcreek Investment Company in order to acquire enough land for a nine-hole addition to create an 18-hole golf course (refer to Figure III-3). The 2005 Land Exchange resulted in the acquisition of 94 acres from the USFS for golf course/recreation use. After the 2005 Land Exchange, Snowcreek Investment Company entered into a covenant with the Town that protected the exchange parcel from being developed with residential housing, commercial lodging, transient occupancy, or being further

subdivided as this land is outside of the Town's Urban Growth Boundary. The covenant was initiated as a part of the 2005 Land Exchange process, and is monitored by the Eastern Sierra Land Trust (see Appendix K).

At the time of the 1981 Master Plan, the Snowcreek village center, the remaining undeveloped Snowcreek area (i.e., Snowcreek VIII), was expected to provide commercial services and a ski base for the future Sherwin Bowl Ski Area (ski area). An Environmental Impact Statement (EIS)[4] for the ski area was adopted by the Inyo National Forest in 1990, but the ski area's development has not been realized. The Project recognizes that the ski base component is not a realistic expectation and envisions Snowcreek VIII as a destination resort and a key anchor in the Town's economic development strategy.

[4] *An Environmental Impact Statement (EIS) is required for projects subject to the National Environmental Policy Act (NEPA).*

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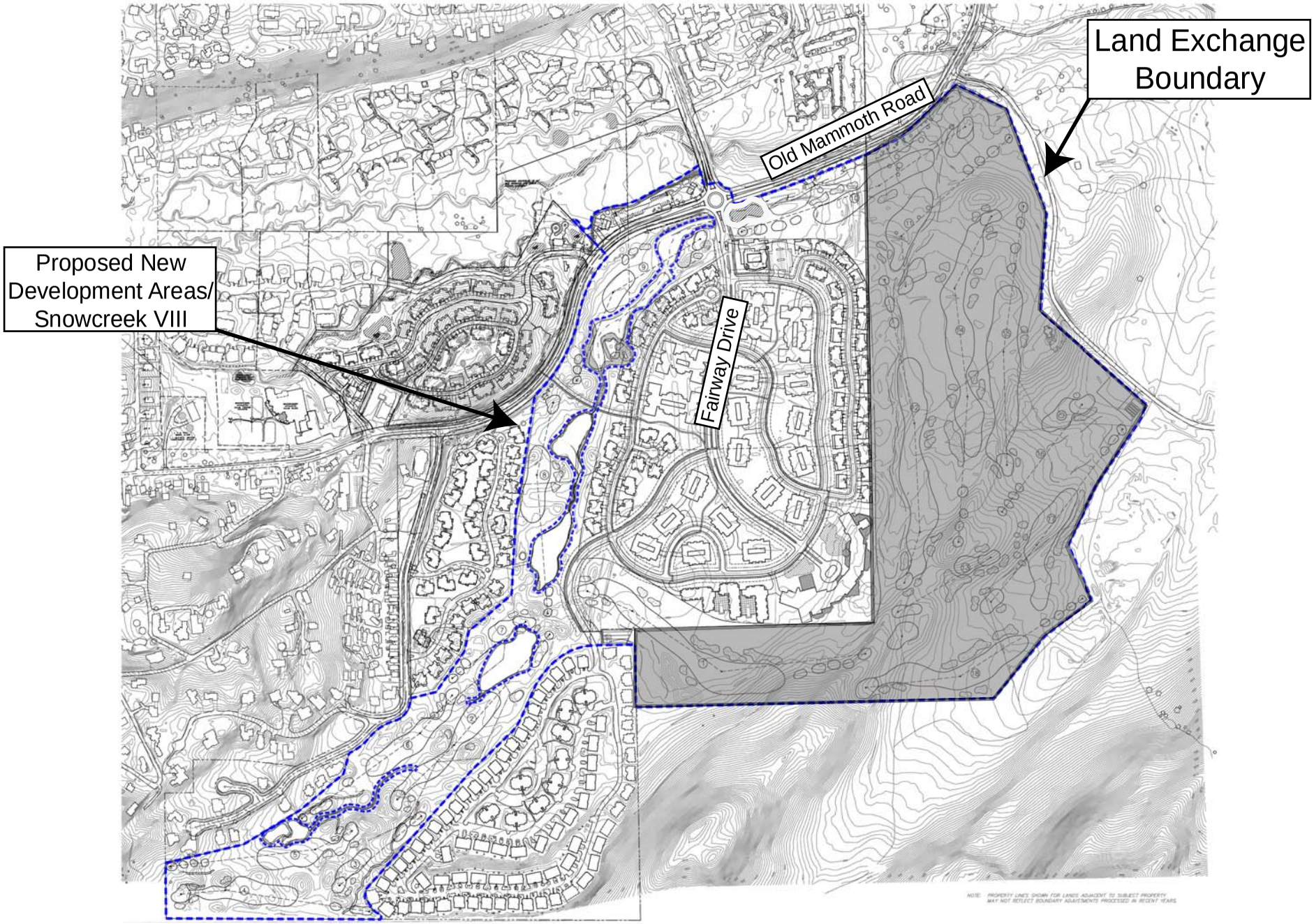

Source: Scheurer Architects, 2006; CAJA 2007.

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NORTH

0 375 750 1125 1500
Scale (Feet)

Figure III-3
Land Exchange Boundary

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2007 Snowcreek Master Plan

As discussed earlier, the Project is intended to both fulfill and update the vision of the previously approved 1974 and 1981 Master Plans (refer to Table III-3). This Draft EIR provides information concerning the environmental impacts of the Project to a level of detail necessary to satisfy the Town's requirements as the lead agency in accordance with the California Environmental Quality Act (CEQA), applicable General Plan Policies and Town Municipal Code Title 17 – Zoning. The Project proposes the development of 850 residential dwelling units, 400 Hotel rooms/suites, and up to 75,000 square feet of non-residential uses.

Table III-3
Proposed 2007 Master Plan Development Summary

Total Master Plan Units Allotted	2,368
Master Plan Build-Out To Date	1,145
Total Master Plan Units Remaining to be Built	1,223
Total Proposed Units to be Built under 2007 Master Plan	1,050
Reduction in Units from Previous Master Plans to 2007 Master Plan	**173**
Non-residential Space Allowed Under Previous Master Plans	150,000 square feet
Non-residential Space Proposed Under 2007 Master Plan	75,000 square feet
Reduction in Non-residential Space from Previous Master Plans to 2007 Master Plan	**75,000 square feet**
Recreation Space Proposed Under Previous Master Plans Recreational Space Proposed Under 2007 Master Plan	Sherwin Ski Bowl nine-hole golf course 18-hole golf course

Sources: 1974, 1981 and 2007 Snowcreek Master Plans, and the Town of Mammoth Lakes Department of Community Development, December 2006.

The Project area is composed of the following Assessor's Parcel Numbers (APN) and associated land use areas shown in parentheses: 40-040-20 (Area A), 40-070-10 (Area J & G), 40-070-11 (Area B-F, H & K), 40-070-12 (Area I), 40-070-13 (Area I), 40-070-23 (Area I), 40-140-04 (Area I & L), and 40-140-05 (Area I) (refer to Figure III-4).

The Project site is primarily undeveloped. The parcels south of Old Mammoth Road were most recently used as pastureland for cattle grazing. Previous historic uses of the Project site are discussed in more detail in Section IV.E (Cultural Resources) of this Draft EIR.

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Legend

A — **Market/General Store, Natural Resources and Historic Interpretive Center**

B — **Hotel**
Guest Suites
Private Residence Club
Retail
Lounge
Restaurants
Wellness Center
Fitness Center
Pool
Spa
Ice Rink/Pond

C/D — **High Density**
Stacked Flats

E/F — **Medium Density**
Stacked Flats, Townhouse

G/H — **Low Density**
Stacked Flats, Townhouse

I — **18-Hole Golf Course**

J — **Resident's Club/Management Offices**
Vacation Rental Office
Fitness Club
Pool
Spa
Grill

K — **Golf Club**
Pro Shop
Restaurant

L — **Outfitters' Cabin**
Equipment Rental
Hiking
Mountain Biking
Cross Country Skiing
Snow Shoeing
Sledding
Trail Head

Source: Scheurer Architects, 2006.

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NORTH

Figure III-4
Illustratred Conceptual Plan

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The specific land uses for the Project are described as follows:

Image and Character

The Project is intended to create a destination resort within Mammoth's mountain resort community, providing a broad range of activities, services and facilities for residents and visitors year round.

The Project's profile is intended to be low on the landscape, with the Hotel located near the back of the site. The Hotel is designed to be distant from Old Mammoth Road, Sherwin Creek Road and surrounding neighbors to maintain a natural, rustic atmosphere while creating an iconic landmark with the Sherwin Mountain Range as its backdrop.

The Project has been designed around the core of Old Mammoth Road, neighboring developments and the existing Snowcreek I through VII areas. With the previously approved Master Plans serving as the foundation, the Project is intended to be a well designed community that integrates resort, including hotel, recreation and retail, as well as residential components.

In addition to public amenities provided in the expanded and enhanced golf course facilities, the Project proposes to include a Store and an Interpretive Center, an Outfitters' Cabin and the provision of Hotel rooms/suites, restaurants, retail, and conference and meeting space. Each of these public amenities components is described in greater detail under the corresponding heading below.

Furthermore, the applicant is currently working with MCWD on the expansion, improvement and distribution of MCWD's recycled water (i.e., tertiary treated water) for use in irrigating the 18-hole golf course. If an agreement between the two parties is finalized and recycled water from MCWD's Wastewater Treatment Plant becomes available at a reasonable cost, the irrigation needs for the golf course may be provided with the recycled water, and thus could result in the availability of untreated ground water that could be treated and used to meet other project or future needs of the Town. This issue is discussed further in Section IV.N (Utilities).

Market/General Store and the Natural Resources and Historic Interpretive Center

The Store and Interpretive Center are located on parcel (APN 40-040-20) north of Old Mammoth Road and west of Minaret Road. This parcel is zoned Resort with an Open Space Stream Corridor (OSSC) overlay. The Store and Interpretive Center would be on the already disturbed portion along Old Mammoth Road; an approximately 150 feet deep and 720 feet wide strip. Because this is greater than the approximate 25-40 foot wide Resort zone, it would encroach into the OSSC overlay zone. However, the OSSC overlay does not prohibit development. The development would not go beyond the wetland delineation line verified by the United States Army Corps of Engineers (refer to Figure III-5). A conservation easement may be recorded against the environmentally sensitive property and the land may be transferred to the Town or a conservation group agreeable to both parties which could allow for public

access. This issue is discussed further in Sections IV.D (Biological Resources), IV.H (Land Use/Planning), and IV.L (Recreation) of this Draft EIR.

The Store and Interpretive Center would be public and accessible to pedestrians, bicyclists, and automobiles. Pedestrians would have access via the bike trails and crosswalks at the proposed roundabout at the Old Mammoth Road/Minaret Road intersection leading to and from the proposed residences and Hotel area (refer to Figure III-4). Automobiles would have access from the two driveways off of Old Mammoth Road. Bicyclists would also use these two driveways, as well as the trail/sidewalk entranceway off of Minaret Road. Additionally, this development site includes a .39 acre surface parking lot.

Market/General Store – Retail Component

The Store draws inspiration from the historic Lutz Market during the early settlement days of Mammoth Camp. It is intended to serve residents and visitors throughout the "Old Mammoth" area of the Town with food, deli, drinks, and sundries. The Store, a stand-alone building approximately 3,500 square feet in size, would consist of retail and storage space, and would provide 20 parking spaces.[5] In addition to the two driveways off of Old Mammoth Road, the Store would have a separate service drive to the rear of the building. Use of this drive would be restricted to service vehicles only for deliveries.

Natural Resources and Historic Interpretive Center

The Interpretive Center would be a stand-alone building approximately 900 square feet in size and would provide six parking spaces. The Interpretive Center would be an interactive educational facility, providing residents and visitors with information and exhibits regarding the history and resources of Mammoth Lakes and the Mammoth Creek Corridor. The Interpretive Center would consist of an entry way, two restrooms, and space to provide educational information and tours relating to the history of Mammoth Lakes and the qualities of the natural characteristics of the region – both biological and ecological.

[5] *One parking space per 150 sq. ft. Mammoth Lakes Municipal Code 17.20.040.Q.1*

Source: Scheurer Architects, 2006.

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NORTH

0 10 20 30 40
Scale (Feet)

Figure III-5
Market/General Store and the Natural Resources and Historic Interpretive Center

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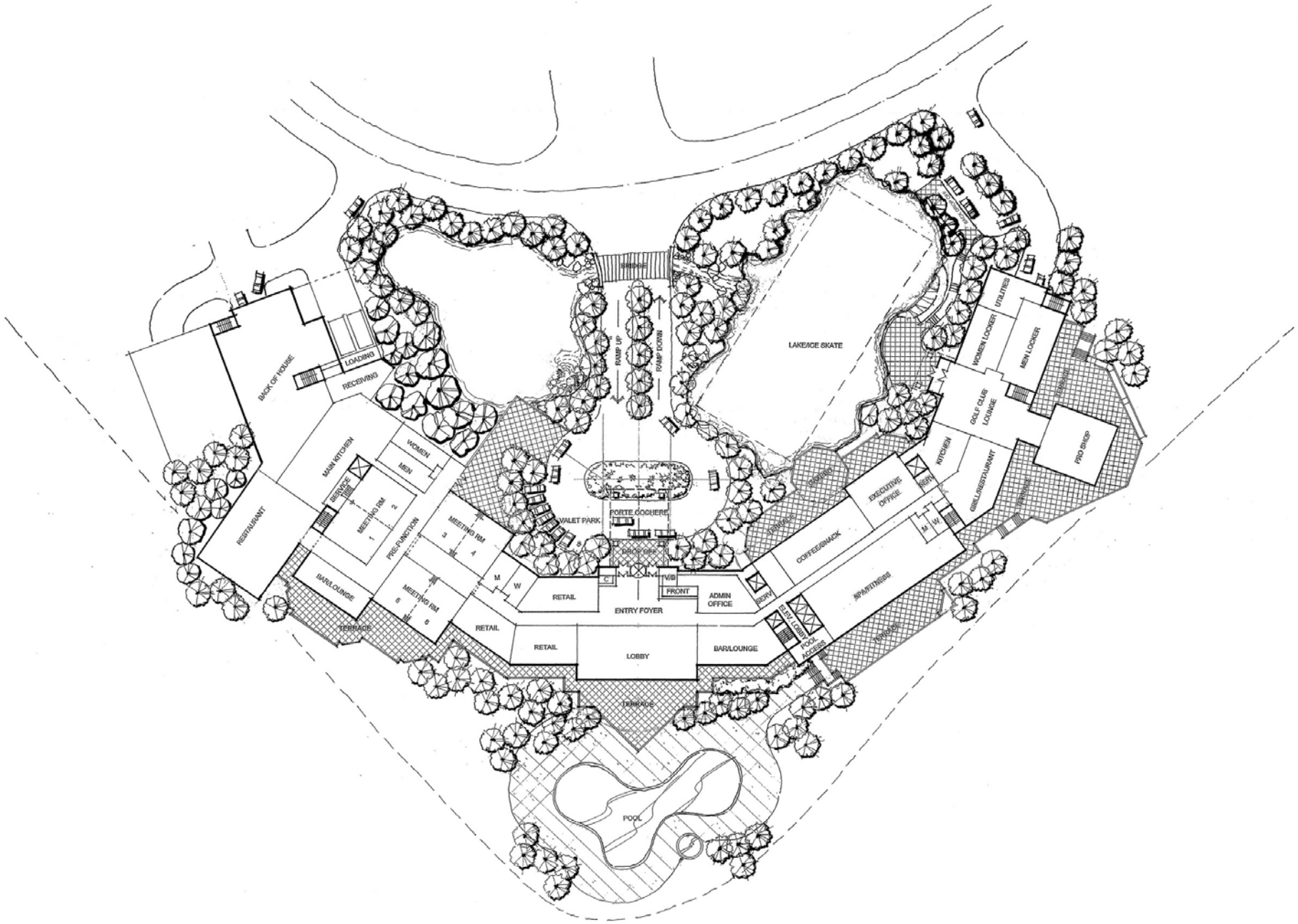
Hotel

Placed at the edge of the community, the Hotel is intended to complement the Mammoth Lakes experience. The Hotel would serve as an anchor and an architectural icon for the Town. The Hotel is designed to be distant from Old Mammoth Road, Sherwin Creek Road and its surrounding neighbors to maintain a natural, rustic atmosphere with the Sherwin Mountain Range as its backdrop.

The Hotel would include 400 guest rooms/suites: 250 Hotel room/suite units and 150 Private Residence Club (PRC)/suite units. The Hotel would include a spa/wellness center, retail space, restaurant/bar/lounge, conference and meeting space, a golf pro shop, a fitness area and pool, and a public ice skating pond. The Hotel would consist of approximately 212,500 square feet of guest and residence rooms/suites, 127,500 square feet of Private Residence Club (PRC)/suite units, and 100,225 square feet of back of Hotel operations (refer to Table III-2). Figure III-6 represents a schematic design of the ground floor level that illustrates the variety of amenities a hotel of this nature may include.

In addition to the Store and Interpretive Center previously described, the Hotel's rooms/suites, restaurants, retail, and conference and meeting space will be available for public use and would also be considered community amenities as they could be rented by community members or groups. These facilities would provide opportunities and venues for residents and visitors to the area alike. The provision of conference and meeting space could increase opportunities to attract corporate business to the area. In addition, this component of the Project will enhance revenues to the Town through increased sales tax and transient occupancy tax (TOT).



Source: Scheurer Architects, 2006.

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Figure III-6
Hotel Level One Floor Plan

Residential Condominiums/Townhomes

The Project includes 850 residential dwelling units which could include a combination of condominium units, single family dwellings, stacked flats and townhomes providing a wide range of home ownership opportunities suitable as either primary or secondary residences. The homes would vary in size from 650 square feet (minimum) to 3,500 square feet (maximum). Housing density would range throughout the Project site from low density to high density (refer to Figures III-7 through III-9).

Of the 850 residential units, 80 units would be designated on site as workforce housing units available for purchase. The balance of the required workforce housing units would be provided off site. The Project would include resort services and amenities, including a Resident's Club with a snack bar, pool, spa and grill. The Resident's Club feature is discussed in more detail below under the heading "recreation."

Housing density for the Project site was calculated by dividing the total number of dwelling units by the total number of acres in the Project. The Project proposes 1,050 dwelling units (850 condominiums and townhome units combined with 200 Hotel dwelling units) developed over 143 acres. This acreage does not include the 94 acres acquired in the USFS Land Exchange previously discussed. Overall housing density for the Project would be approximately 7.35 dwelling units/acre (1,050/143). The Project combined with the existing/entitled residential development results in an overall Snowcreek Master Plan density of approximately 6.36 dwelling units/acre (2,195/345).

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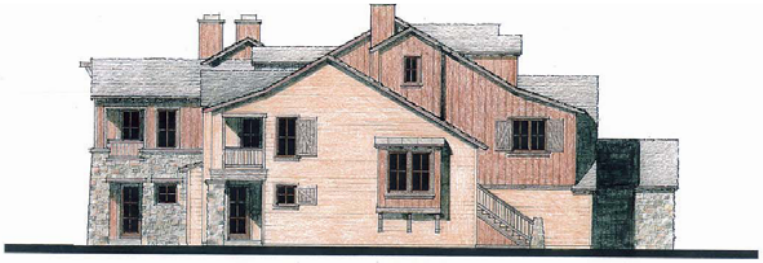
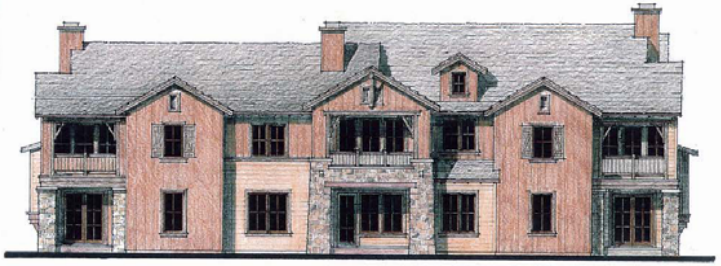
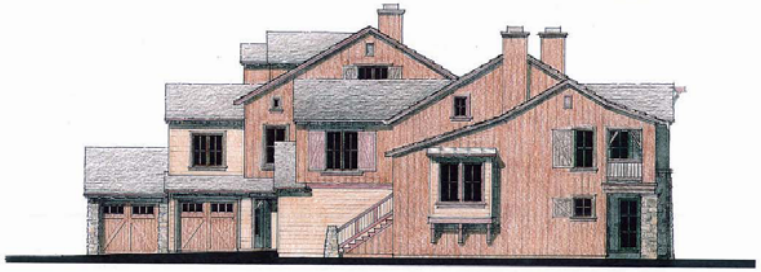


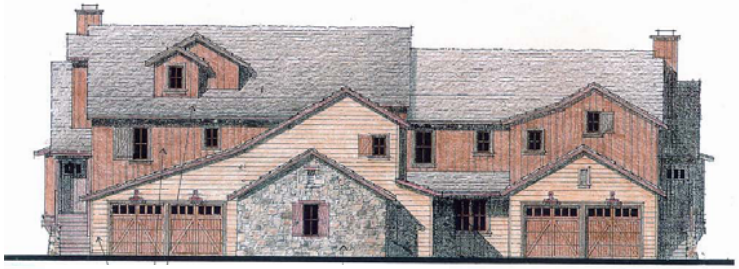
LEFT ELEVATION
FOURPLEX BUILDING



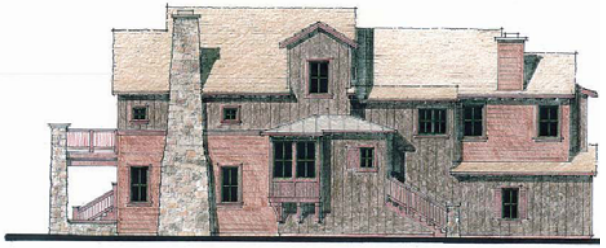
REAR ELEVATION
FOURPLEX BUILDING



RIGHT ELEVATION
FOURPLEX BUILDING



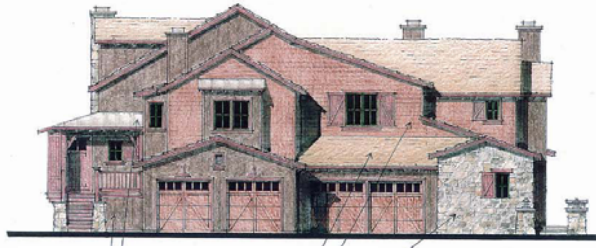
FRONT ELEVATION
FOURPLEX BUILDING



LEFT ELEVATION
DUPLEX BUILDING

REAR ELEVATION
DUPLEX BUILDING

RIGHT ELEVATION
DUPLEX BUILDING



FRONT ELEVATION
DUPLEX BUILDING

Source: Scheurer Architects, 2006.

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Figure III-7
Low Density Units

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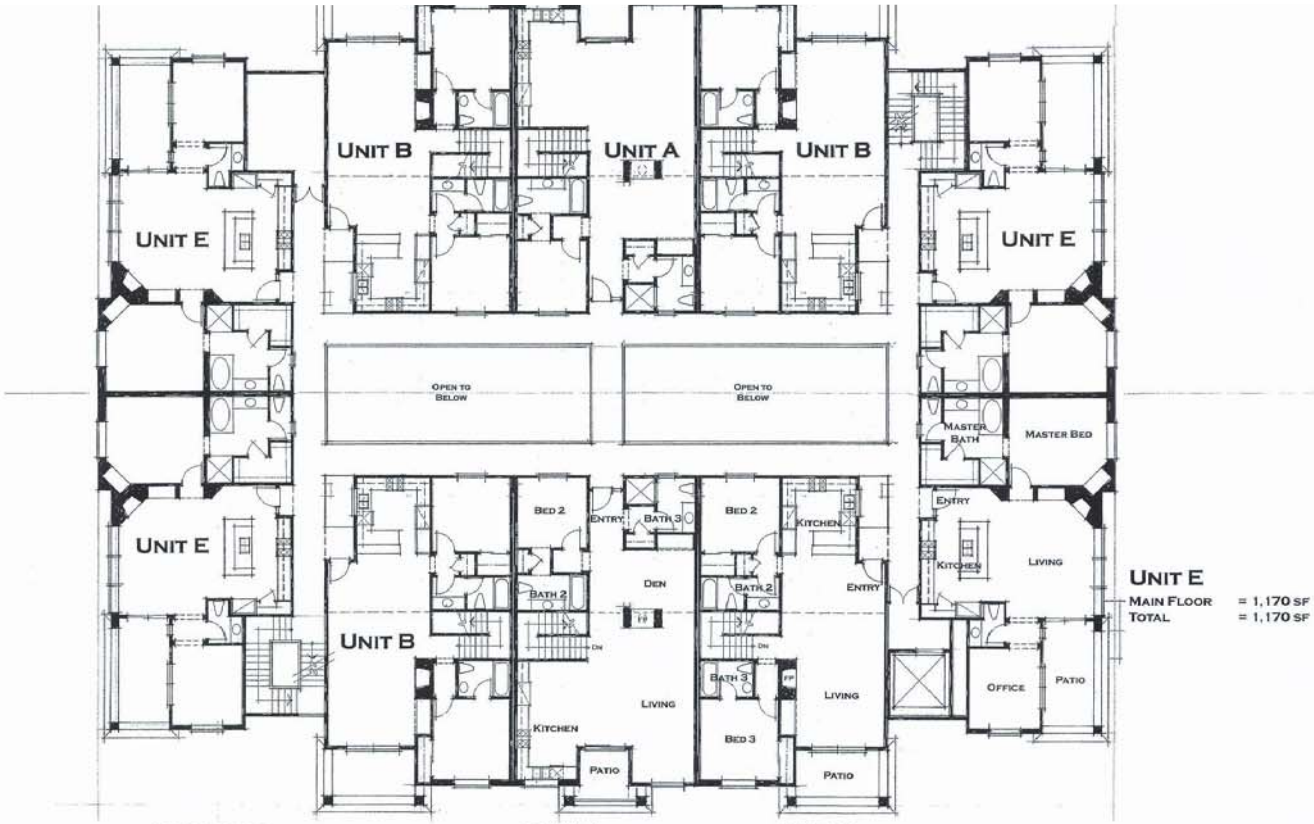

FLOOR PLAN

TOTAL: 20 UNITS PER BUILDING

UNIT A

MAIN FLOOR	= 1,288 SF
LOWER FLOOR	= 678 SF
TOTAL	= 1,966 SF

UNIT B

MAIN FLOOR	= 1,230 SF
LOWER FLOOR	= 624 SF
TOTAL	= 1,854 SF

UNIT C

MAIN FLOOR	= 1,288 SF
UPPER FLOOR	= 497 SF
TOTAL	= 1,785 SF

UNIT D

MAIN FLOOR	= 1,230 SF
LOWER FLOOR	= 484 SF
TOTAL	= 1,714 SF

UNIT E

MAIN FLOOR	= 1,170 SF
TOTAL	= 1,170 SF

Source: Scheurer Architects, 2006.

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Figure III-8
Medium Density
Multi-Family Units

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Source: Scheurer Architects, 2006.

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Figure III-9
High Density
Multi-Family Units

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Recreation

The Project is designed to enhance and complement recreational opportunities already available in the Town. The Project includes several "stand-alone" recreational amenities such as an expanded privately owned publicly accessible golf course, a clubhouse and attendant facilities, an outfitters' cabin, a resident's club/snack bar, a hotel with ice skating, swimming, workout facilities, and a spa and wellness center. Detailed descriptions of these features are provided below.

Golf Course & Golf Clubhouse

The existing privately owned publicly accessible nine-hole golf course on the west and north portions of the Project site would be enlarged to include an additional nine holes and a maintenance facility on the east and south edges of the Project site to create a privately owned publicly accessible 18-hole golf course. The 18-hole golf course would encompass approximately 155 acres. The course would be designed to conserve water and improve the use of native vegetation. The existing nine-hole course may be modified and the existing temporary clubhouse would be removed and replaced with an approximately 3,000 square foot golf pro shop and lounge. The new portion of the golf course and possibly portions of the existing course would be re-graded and contoured to create topographic undulations in character with the surrounding landforms. However, as previously stated, major reconfiguration and recontouring is not anticipated for the existing nine holes. Water would be routed throughout the course and fed into new ponds which would store irrigation water and provide drainage retention (refer to Figure III-4).

Outfitters' Cabin

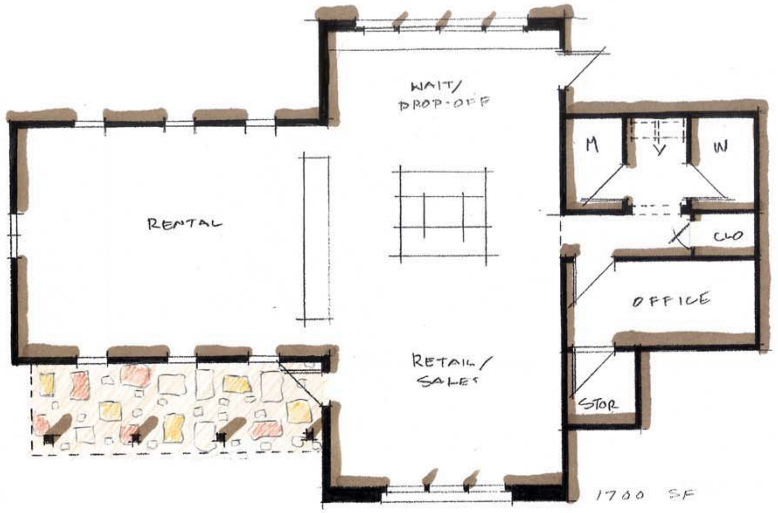
The approximately 1,700 square foot Outfitters' Cabin (refer to Figure III-10) would act as a portal to the outdoor activities available on public lands of the Inyo National Forest in the Sherwin Mountain Range for use by all residents of the Town, as well as by residents of the Project and the general public. As a portal, the Outfitters' Cabin would provide public parking and would serve as the hub of year-round off-site recreational activities such as hiking, biking, fishing, cross country skiing, snow-shoeing, hay rides and sleigh rides. Retail services and equipment rental would be provided to serve these types of activities. The Outfitters' Cabin would be established on the approximate 155 acres where the 18-hole golf course would be developed (refer to Figure III-4).

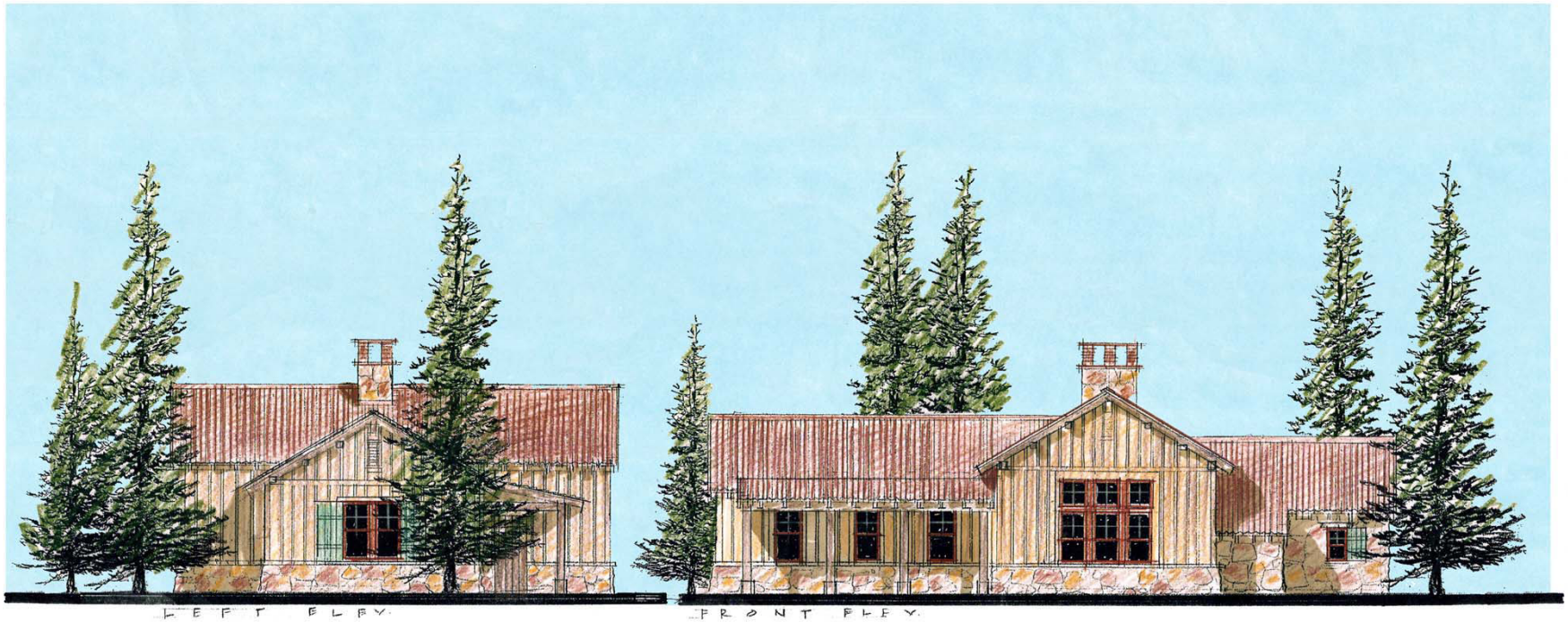
Resident's Club

The Resident's Club is for Snowcreek VIII residents and would consist of a pool, spa, fitness facility, kitchen, bar, and outdoor barbeque/cabana. In addition, this structure would accommodate the rental office/facility management offices (refer to Figure III-11).

Public Plazas, Walkways, Ponds and Streams

A key concept of the Project is to connect people with nature and neighbor with neighbor, and encourage people to walk and bike. As such, the careful placement of hiking trails, bike trails, along with paths, sidewalks and public plazas would aim to connect the Hotel and residents with the Town, as well as, with the proposed Outfitters' Cabin, Store, Interpretive Center, and the existing Snowcreek Athletic Club, Sierra Meadows Ranch Equestrian Center, the Sherwin Mountain Range and Mammoth Creek. The walkways and bike paths will connect internally and with existing or planned Town paths and with nature trails. The trails and sidewalks will be accented with ponds and natural plantings.





Source: Scheurer Architects, 2006.

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Environmental Planning and Research

Figure III-10
Outfitters' Cabin

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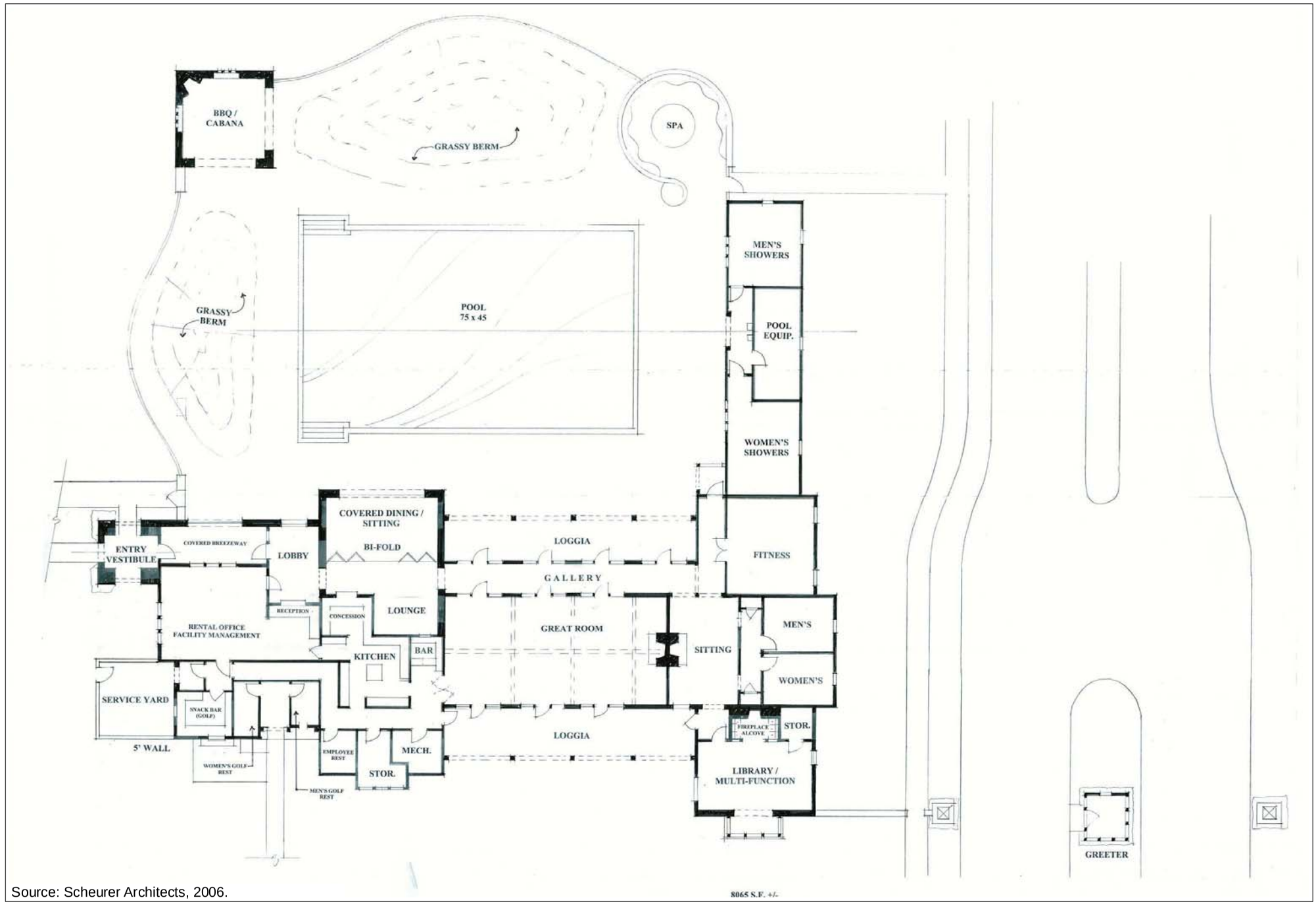

Source: Scheurer Architects, 2006.

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Environmental Planning and Research

Figure III-11
Resident's Club

Infrastructure

Roadways

The existing major public roads that serve the Project site are Old Mammoth Road, Minaret Road and Sherwin Creek Road. Primary access to the Project site would be provided from the Old Mammoth Road/Minaret Road intersection. The addition of a roundabout at this intersection is part of the Project. The number of internal intersections at the Project site would be limited. New internal access roads would be created throughout the Project site. All internal circulation would interface at various points with various links to the surroundings, whether it be to external trails accessing public lands to the south (Sherwin Range) or the eastern Forest Service lands. Internal roadways would be privately owned and maintained. The internal roadway system would provide access to various residential areas and non-residential land uses throughout the Project site. Trails and/or emergency access roadways would allow secondary points of access from internal streets and roadways. Roadway designs would fit the land and be sensitive to topography, vegetation and views. Safe crossings for pedestrians would be included and crosswalks would be provided to cross Old Mammoth Road at the Minaret Road roundabout (refer to Figure III-4). This subject is discussed in more detail in Section IV.M (Traffic).

Vehicular Circulation and Parking Systems

The primary point of vehicular access to the Project site would be from the Old Mammoth Road/Minaret Road roundabout. A second Project access would be located to the west of the intersection of Old Mammoth Road/Minaret Road. This access would function primarily as an emergency access. Access to the Project facilities and lodging would be from an internal roadway system as previously described above (refer to Figure III-4). Fairway Drive currently provides access to Snowcreek V through the Project site. This access point would remain unchanged, however Fairway Drive itself will be realigned as part of the Project. The Store and Interpretive Center would be accessed from two driveways off of Old Mammoth Road and the Outfitters' Cabin would be accessed from Sherwin Creek Road.

Short-term surface parking would be provided adjacent to the check-in locations and then guests would be directed to understructure parking located under the Hotel and major residential buildings. Short-term parking uses include passenger drop off and loading, service, deliveries, transit vehicles, and guest parking for residential uses. Some buildings may share check-in and parking access. Workforce residential units would be allowed surface parking for both resident and guest use. Parking for the golf course will be provided through the Hotel parking. Surface parking is also provided at the Outfitters' Cabin and the Store and Interpretive Center. Transit shelters would be located at shuttle stops. The specific design, location, and operational criteria for these transit facilities would be considered in conjunction with the pending development of a community-wide transit system. Surface parking lots would be appropriately landscaped and would connect to pedestrian/bicycle and trail systems. Where practical, the landscaping would include existing trees adjacent to and within surface parking areas.

Service

Service vehicles would be routed and managed to minimize conflicts with the Project's visitor activities and local traffic. All buildings would be serviced from internal roadways with the exception of the Store, which would have a service driveway off of Old Mammoth Road, and the Outfitters' Cabin, which would be accessed from Sherwin Creek Road. The Hotel would have designated central facilities for service delivery and waste management. Service areas would be designed to accommodate required service vehicle sizes.

Emergency Vehicle Access

Emergency vehicles would circulate through the Project area using the internal roadway system. In addition, supplemental fire lanes would be developed in conjunction with the roadway system to provide looped secondary emergency vehicle access and egress. Fire lanes, turning radii and back up space around buildings would be designed in cooperation with local officials so as to be adequate for emergency and fire equipment vehicles. Pavements would be designed to support loads created by emergency vehicle traffic. Standpipe and fire suppression systems connections would be incorporated into architectural and landscaping design elements where practical and in locations accessible to fire equipment.

Pedestrian and Bicycle Circulation System

All aspects of the Project would be connected with a series of paths and walkways to accommodate pedestrian and bicycle use or pedestrians and cyclists/bikers. Links would occur at various points to Old Mammoth Road and its walking and bicycle paths. The pedestrian and bicycle system would include interior trails and sidewalks as well as connecting trails from recreational amenities, outdoor spaces and residential areas. Also proposed are, walkways to and from residential areas, as well as trail connections would tie into the larger Town-wide recreational trail network which includes pedestrian trails, bike lanes and sidewalks that are adjacent to major roadways such as Old Mammoth Road and Minaret Road (refer to Figure III-4). When possible, the major internal pedestrian corridors would be located adjacent to landscape features.

Structured or Understructured Parking

The Project would provide understructure parking facilities for the majority of the development. Surface parking for check in, tour bus, and delivery/service vehicles would also be provided. Parking structures would be designed to provide adequate width and height to accommodate most private vehicles. Considerations for height would factor the accommodation of vehicles with rooftop racks or cargo boxes. Design of the parking structures is to be consistent with the overall building design. The exterior and interior will incorporate the appropriate signage (i.e., graphic designs, as symbols, emblems, or words, used for giving directions or warning) and lighting to enable convenient way finding and safety. The exit

area would be well lit. Parking entrance location would not unduly conflict with pedestrian activity. The quantity and layout for disabled spaces shall conform to Americans with Disabilities Act of 1990 (ADA) parking standards.

Bus/Shuttle Shelters

The Project would include bus/shuttle shelters located to facilitate the safety, use and comfort of passengers using transit within the Project area. Shelters would be sited to provide adequate distance from adjacent roadways to allow passenger staging, loading and unloading. Shelters, when feasible, would be located on north and east sides of roadways to allow maximum solar exposure and facilitate snowmelt on surrounding paved surfaces. Hard surface areas around shelters would be adequate to serve passenger activities, be durable, and be connected to the local pedestrian trail and walkway network. Roof forms would be designed to hold snow or to shed it away from active pedestrian areas. Shelter walls and orientation would provide protection from prevailing winds to the extent possible. Signage and user information displays associated with the shelters would be consistent with Town Municipal Code Chapter 17.40 "Signs." Lighting used for shelters and adjacent areas would have shielded light sources so as not to create light spill or glare.

Snow Management

Snow management would meet or exceed Town Municipal Code requirements. Snow management would be addressed to ensure that residents and visitors are provided safe and convenient access to and from lodging and within the public use areas throughout the winter season. The adequacy of snow storage areas adjacent to driveways and parking areas would be evaluated based upon Zoning Code requirements for similar uses. Ground level snow storage areas would be identified. Landscape snow shed areas would be designated and located adjacent to the base of buildings, but not block required egress routes, and would be sized to accommodate the anticipated volumes of snow. Roof forms would be designed in coordination with pedestrian areas at the base of buildings. Snow falling from roofs would be directed to landscaped areas at the base for the buildings or to lower level flat roofs. In limited areas, snow rails or fencing, and heated gutters and downspouts may be required to prevent snow shed and ice buildup. Snow would not be permitted to shed freely into active pedestrian areas. However, minor snow depths may remain on pedestrian paved areas during heavy snow and cold periods. When snow begins to melt and creates conditions for icing of surfaces, it would be removed or treated with anti-icing agents. Snow would be removed from heavily used pedestrian paved areas, ramps and stairs. For other circulation routes and pedestrian areas, snow would be removed as soon as practical following snowfall to ensure access by emergency vehicles and easy pedestrian movement. Appropriately sized snow removal vehicles would be allowed into the pedestrian areas.

Grading and Drainage

Stormwater runoff would be retained on the golf course expansion property to the level of the 100-year storm in all areas where reclaimed water is proposed to be utilized. These retention facilities would be sand traps and/or natural and man-made depressions.

Stormwater from the residential/commercial development land requires retention of the 20-year storm. A new retention/infiltration system meeting this 20-year storm capacity would be installed just south of Old Mammoth Road and west of Sherwin Creek Road on the proposed new golf course. Stormwater conveyance systems from the development to the retention facilities would be designed for storm conditions of 100-year intensity. These conveyance systems would consist of roadside swales, storm drain inlets and pipes, as well as the existing lined swales and ponds of the existing golf course.

Off-site tributary areas are located south of the Project site. Offsite runoff would be conveyed through the site with conveyance systems designed to the level of the 100-year storm. This drainage is conveyed through the existing ponds and lined swales to the new retention basins. In periods of high runoff the basins could overflow to a vegetated swale, then to a culvert at Sherwin Creek Road, and then in an existing swale to Mammoth Creek.

Demolition

The Project includes the demolition of the Inyo National Forest Service administrative site (i.e., tack room and storage facilities) that is currently located on the eastern edge of the Project site off of Sherwin Creek Road. The relocation of this facility has been previously analyzed in the 1997 Snowcreek Golf Course Expansion Environmental Impact Statement (EIS), however the impacts associated with the demolition of the facility are analyzed in this Draft EIR. In addition, the existing temporary golf clubhouse, the Snowcreek Sales and Information building, and the 30-square foot Snowcreek sign would be removed.

Building Design

Form and Mass, and Scale

The Project would organize the form and mass of a single building in relationship to the scale of neighboring buildings and in relationship to the size and use of adjacent open space. A not-to-exceed 120-foot height is proposed for the Hotel. Residential units would range from two to three stories in height. Building mass would be varied to create variety in the character of the building elevations. This subject is discussed in more detail in Section IV.B (Aesthetics).

In general, the Project would be designed to be responsive and expressive of its alpine setting. Organized along a central curving parkway, buildings are laid out amongst landscaping and meandering water features. The parkway terminates at the Hotel with resort amenities, and public ice skating pond and a

swimming pool. The Hotel, although tall, is stepped-down at the ends to reduce apparent mass and provide a pleasing form and allow views to beyond.

The housing building forms are set back, stepped, and have traditional sloping roofs. The relation between buildings aims to allow openness to views, light and air. Each building density type: Low, Medium, and High, are appropriately scaled and massed to connect with trails, landscape and water features between buildings (refer to Figure III-7 through Figure III-9). Medium and High density housing are built over understructure parking.

The Project's massing, form and scale are aimed to be complementary to the natural setting. The minimal surface parking, the setbacks, the relations between buildings, the landscaping, and the building forms aim to reinforce a pedestrian scaled complex with visually pleasing buildings.

Landscape Design and Planting

The landscaping plans would reflect a natural "native" feel, utilizing various types of pines, spruce and aspen, natural ground cover and minimal use of lawn area. Water elements, such as ponds and interconnecting streams would meander throughout the Project site. The landscaping would complement the architecture in type and massing. Landscape site work would be consistent with traditional approaches for the region, and would address current needs, Town Municipal Code, regulations and environmental considerations, and designed to enhance user experience, safety, and enjoyment. The Project would use native plants that are indigenous to the Mammoth Lakes region. Landscaping shall conform to the Town's adopted water-efficient landscape regulations.

Lighting

All site and building lighting would be installed in conformance with the Town's outdoor lighting ordinance.[6] Excessive illumination would be avoided and lighting would be designed and placed that minimizes glare and reflection and to maintain 'dark skies.'

Signage

Signage is the term used to describe the graphic designs, as symbols, emblems, or words, used for giving directions or warning. The Project's signage would be kept to a minimum. The Project would provide signage that is clear, understandable and attractive to both the vehicular and pedestrian viewer. The signage would reflect the mountain retreat community character of the Project with regard to materials, form and use. Signage would inform and direct, but in a manner and style which creates a memorable impression and would show a connection to nature, architecture and the historic past. It would link

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[6] *Town of Mammoth Lakes, Municipal Code, Chapter 17.34, Outdoor Lighting Code.*

together the entire resort, clubs and residential components, and cultivate an inclusive relationship throughout the Project site.

Phasing & Schedule

The Project has been organized so that it could be developed in several phases, with the golf course expansion and Hotel construction potentially occurring in the first phases and various residential components being progressively constructed at a pace dictated by market conditions. Each phase would operate successfully as a complete entity so that the Project is attractive and inviting throughout the entire development. All staging would occur within the Project boundaries. Most construction phases would last approximately 18 to 24 months but some may be as long as 24 to 30 months. Some phases may be under construction simultaneously. Construction activities are proposed to be complete in 2017.

C. PROJECT OBJECTIVES

The objective of the Project is to update the 1981 Master Plan, to complement the changes in the Town since 1981, and to complete the Mammoth Lakes experience by fulfilling the vision for a destination resort within the resort Town. This Project was designed to update the objectives of the 1981 Master Plan. The objectives of the Project are:

- To complete the Mammoth Lakes resort experience with a destination resort and residential units in a natural rustic setting that will attract longer year round stays with higher per visitor spending.
- Coordinate all planning criteria with regard to density, land use, open space and environmental protection with the Town of Mammoth Lakes General Plan, Snowcreek Master Plan 2007 and Town of Mammoth Lakes Zoning Code.
- Avoid environmentally sensitive sites and maintain the basic integrity of natural site features.
- Preserve existing tree cover, meadow areas, creeks and other natural site features by incorporating them into the design of land use areas.
- Minimize environmental impacts by carefully siting each building cluster, developing architecture which fits site characteristics, establishing a re-vegetation plan and using innovative construction techniques.
- Create a landmark hotel property providing an icon for Mammoth similar to the Banff Springs Hotel in Alberta, Canada or the Ritz Carlton, Bachelor Gulch Hotel in Beaver Creek, Colorado for the Town by providing a luxury destination rustic resort hotel and neighborhood offering the characteristics of the best North American and European ski resorts.

- Provide year round access to the Sherwin Range with an Outfitters' Cabin for hiking and biking in the spring, summer, and fall as well as access to the Sherwin Bowl for hike-in downhill skiing as well as snow shoeing and cross country skiing in the winter.
- Phase the development to reflect market demand and to follow the existing growth patterns of Mammoth Lakes.
- Improve road circulation patterns leading to and through the development including a roundabout.
- Provide diverse recreational amenities to promote year-round use including the completion of the golf course from a nine-hole to an 18-hole course, as well as amenities such as a golf clubhouse, an Interpretive Center, and the addition of an Outfitters' Cabin that will serve as a portal to the Sherwin Range and U.S. Forest Service lands for hiking, hike-in skiing and other outdoor activities.
- Blend the building types and densities with surrounding residential developments to provide orderly visual and land use transitions.
- Protect, preserve and/or improve the irrigation and the natural state of the existing Mammoth Creek system.
- With the Hotel as the backdrop setting, nestle the residential units in a manner to best utilize the land, maximize views and orientation to open space and recreation, creating an intimate neighborhood.
- Create focal points and view corridors, with a variety of visual experiences.
- Encourage a pedestrian-friendly environment by providing transportation with Hotel and Home Owners Association (HOA) shuttle service along with connections and stops for the Town and community mass transit.
- Encourage pedestrian circulation by providing a convenient network of plaza spaces and walks, along with paths and trails providing connectivity to the community.
- Provide adequate parking areas for residents and guests; areas which are designed as an integral element of the plan.
- Create architectural expressions complementing the Sherwin rustic mountain setting and the iconic resort hotel buildings by emphasizing roof lines, building massing, and fitting the varying topographic conditions for the residential units.

The objectives of the 1981 Master Plan, which are the same as the objectives as the 1974 Master Plan, are as follows:

- Coordinate all planning criteria with regard to density, land use, open space and environmental protection with the Mono Plan, local master plan and community desires.[7]
- Provide a variety of housing types to meet the varying needs of socio-economic groups and lifestyle patterns. Include permanent residences, condominium and rental units and overnight facilities.
- Avoid environmentally sensitive sites areas and maintain the basic integrity of natural site features.
- Preserve existing tree cover, meadow areas, creeks and other natural site features by incorporating them into the design of land use areas.
- Minimize environmental impacts by carefully siting each building cluster, developing, architecture which fits site characteristics, establishing a revegetation plan and using innovative construction techniques.
- Create a new Mammoth Lakes community image by providing a uniquely designed commercial/hotel area that offers the characteristics of European ski resorts.
- Provide for a new ski base facility to serve the future Sherwin Bowl development.
- Phase the development to reflect market demand and to follow the existing growth patterns of Mammoth Lakes.
- Improve road circulation patterns leading to and through the development.
- Provide diverse recreational amenities to promote year-round use.
- Blend the building types and densities with surrounding residential developments to provide to provide orderly visual and land use transitions.
- Protect, preserve and/or improve the irrigation and the natural state of the existing Mammoth Creek system.
- Establish small living villages by clustering units to best utilize buildable land, maximize views and orientation to open space/recreational amenities, and to create neighborhoods of a smaller and more intimate scale within which individuals can comfortably relate.

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[7] *The Mono Plan refers to the 1975 Master Plan for Mammoth Lakes. Today, this would be replaced with the Town's General Plan.*

- Create community focal points, view corridors, and a variety of visual experiences throughout the Project.
- Discourage automobile traffic and encourage pedestrian circulation by providing a convenient network of walks, paths and plaza spaces.
- Provide adequate parking areas for residents and guests; areas which are designed as an integral element of the plan.
- Create visual identity within each village cluster by developing diverse architectural concepts which relate aesthetically to existing land forms, make use of natural colors and materials consistent with the climate and setting.
- Develop low profile architectural expressions which emphasize roof line, building massing and fit varying topographic conditions.
- An objective in creating a year-round resort is to help reduce the peaks and troughs in the Mammoth Lakes economy that in the past, have tied to the highly seasonal pattern of visitation.

D. DISCRETIONARY ACTIONS

The Town is the Lead Agency for purposes of complying with CEQA and is the primary public agency responsible for approving projects on these properties. However, this Draft EIR may be used by various governmental decision-makers for discretionary permits and actions that are necessary or may be requested in connection with the Project, as well as any other discretionary permits and actions that may be identified during the environmental review and entitlement process**.** The primary discretionary action necessary for the Project is approval of the Snowcreek VIII, Snowcreek Master Plan Update – 2007 (2007 Master Plan).

The following approval actions will be done concurrently with approval of the overall 2007 Master Plan:

- General Plan Amendment to remove the Sherwin Ski Bowl from the Snowcreek Master Plan (this only applies to the 1987 General Plan)
- Zoning Code Amendment for 1) building height for Hotel and 2) transfer of un-used density within the master plan area.
- Development Agreement

The following approval actions will be done post the approval of the Master Plan:

- Conditional Use Permits
- Design Review

- Vesting Tentative Tract Maps
- Building Permits
- Grading Permits
- Any other necessary discretionary or ministerial permits and approvals required for the construction or operation of the Project

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IV. ENVIRONMENTAL IMPACT ANALYSIS
A. IMPACTS FOUND TO BE LESS THAN SIGNIFICANT

INTRODUCTION

Section 15128 of the *CEQA Guidelines* states:

> *An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.*

An Initial Study (IS) was prepared for the Project in October 2006 (see Appendix A). Based on the analysis contained in the study, it was determined that implementation of the project would not result in significant environmental impacts to the environmental impact topics listed below. These topics, therefore, are not discussed in detail in Section IV of this EIR. (Some potential impacts are discussed in the various sections of Section IV and were determined to be less than significant; those issues are not discussed below.)

AGRICULTURAL RESOURCES

The Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. The Farmland Mapping and Monitoring Program (FMMP) designates the site as "other land" and no important farmland is identified. Therefore, the Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. Thus there is no impact and no further analysis of this issue is required.

The Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. Generally, lands given the Land Use Designation of Agriculture (AG) may be eligible for a Williamson Act Contract, depending on the use of the land. The project site is zoned Resort-R and Open Space-OS and as stated previously, there is no identified prime farmland on the project site. Therefore, the Project would not conflict with existing zoning for agricultural use or Williamson Act Contract. Thus there is no impact and no further analysis of this issue is required.

The Project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use. Portions of the Project site have been utilized for cattle grazing in the recent past. However, no such uses are currently in existence at the site. Therefore, the Project would not result in conversion of Farmland to non-agricultural use. Thus there is no impact and no further analysis of this issue is required.

AIR QUALITY

The Project would not create objectionable odors affecting a substantial number of people The types of projects that commonly result in odor impacts include: wastewater treatment plant, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing, fiberglass manufacturing, auto body shops, rendering plants, and coffee roasters. The Project does not include any of these types of uses and therefore the Project would not create objectionable odors that could affect a substantial number of people. Impacts related to objectionable odors would be less than significant.

BIOLOGICAL RESOURCES

The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. The Project site and its vicinity are not located within an area covered by a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan.

GEOLOGY AND SOILS

The Project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. The Project does not include the use of septic tanks. No further discussion of this issue is necessary.

HAZARDS AND HAZARDOUS MATERIALS

The Project would not create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials. At the time the Initial Study was prepared the Project included a propane tank storage area for propane distribution to the Town, which would require regular use, transport, and disposal of hazardous materials. Thus, the EIR would have addressed the potential for the Project to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. However, the propane tank farm is no longer a part of the Project. Thus, no further analysis of this issue is required.

The Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. See discussion above. Therefore, no impact would occur and no further analysis of this issue is required.

The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an exiting or proposed school. The Project site is not located within 0.25 mile of an existing or proposed school. Thus, no further analysis of this issue is required.

The Project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result would create a significant hazard to the public or the environment. The Project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the Project would not result in impacts related to being located on a site that is included on a list of hazardous materials sites. Thus, no further analysis of this issue is required.

The Project would not be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, resulting in a safety hazard for people residing or working in the project area. The Project site is not within an airport land use plan, nor is it within two miles of a public or private airport. The airport closest to the Project site is the Mammoth Yosemite Airport, located approximately seven miles to the east of the Project site. Therefore, the Project would not expose persons to safety hazards associated with an airport. Thus, no further analysis of this issue is required.

The Project would not be within the vicinity of a private airstrip, resulting in a safety hazard for people residing or working in the project area. The Project site is not within two miles of a public or private airport. The airport closest to the Project site is the Mammoth Yosemite Airport, located approximately seven miles to the east of the Project site. Therefore, the Project would not expose persons to safety hazards associated with an airport. Thus, no further analysis of this issue is required.

HYDROLOGY AND WATER QUALITY

The Project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. No dams or levees are located in the Project site area. Therefore, the Project would not expose people or structures to a significant risk or loss, injury or death involving flooding, as a result of the failure of a levee or dam. Thus, no further analysis of this issue is required.

LAND USE AND PLANNING

The Project would not physically divide an established community. Although the Project site is undeveloped, development and a roadway system already occur in the Project area. Implementation of the Project would not divide an established community and would not preclude the access or future use of any surrounding areas. Thus, no further analysis of this issue is required.

The Project would not conflict with any applicable habitat conservation plan or natural communities conservation plan. The Project site and its vicinity are not located within an area covered by a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan. Therefore, development of the Project would not conflict with any habitat conservation plan and no further analysis of this issue is required.

MINERAL RESOURCES

The Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. There are no known mineral resources at or near the Project site. Thus, the Project would not result in the loss or availability of a known mineral resource that would be of value to the region and the residents of the state. No further analysis of this issue is required.

The Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. See discussion above. Therefore, no impact would occur and no further analysis of this issue is required.

NOISE

The Project would not be located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, exposing people residing or working in the project area to excessive noise levels. The Project site is not within an airport land use plan, nor is it within two miles of a public or private airport. Therefore, the Project would not expose persons to safety hazards associated with an airport. Thus, no further analysis of this issue is required.

The Project would not be within the vicinity of a private airstrip, exposing people residing or working in the project area to excessive noise levels. See discussion above. Thus, no further analysis of this issue is required.

POPULATION AND HOUSING

The Project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. There are no existing housing units on the Project site. Therefore, the Project would not displace substantial numbers of existing housing, and no further discussion of this issue is required.

The Project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. See discussion above.

TRANSPORTATION AND TRAFFIC

The Project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. Due to the nature and scope of the Project, implementation of the Project would not have the potential to result in a change in air traffic patterns at any airport in the area. Therefore, no further discussion of this issue is required.

UTILITIES AND SERVICE SYSTEMS

The Project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. This question would typically apply to properties served by private sewage disposal systems, such as septic tanks. Section 13260 of the California Water Code states that persons discharging or proposing to discharge waste that could affect the quality of the waters of the State, other than into a community sewer system, shall file a Report of Waste Discharge (ROWD) containing information which may be required by the appropriate Regional Water Quality Control Board (RWQCB). The RWQCB then authorizes a National Pollutant Discharge Elimination System (NPDES) permit that ensures compliance with wastewater treatment and discharge requirements. The Project site is not served by a private on-site wastewater treatment system, but instead conveys wastewater via municipal sewage infrastructure to a treatment plant operated by the Mammoth Community Water District (MCWD). This treatment facility is a public facility and is therefore subject to the State's wastewater treatment requirements. Additionally, it should be noted that at the time the Project Water Supply Assessment was prepared, MCWD was not proposing to service the Outfitters' Cabin (1,700 sq ft) located at the far eastern boundary of the Project site, near the base of Sherwin Range. This is due to the fact that the Outfitters' Cabin is outside the MCWD service area. However, it has since been determined that MCWD can provide water services to the Outfitters' Cabin. MCWD determined that the nominal volume of water services needed to service the restroom and ancillary needs for the Outfitters' Cabin is available and could be provided through a separate agreement for MCWD customers located outside of the MCWD service area. (see Appendix L) All wastewater from the Project site is therefore treated according to the wastewater treatment requirements enforced by the California Regional Water Quality Control Board, Lahontan Region, and no significant impact would occur. Therefore, no further analysis related to this specific issue is required.

The Project would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs. Solid waste disposal service for the Town of Mammoth Lakes is currently contracted to Mammoth Disposal Incorporated. Solid waste is disposed at the Benton Crossing Landfill, which is located within Mono County. The landfill has a remaining capacity of 1.7 million cubic yards of compacted waste and is anticipated to have the capacity to accommodate the Town's waste generation and disposal needs for the next 20 years. In addition, the Town has an option for five years at the Pumice Valley Landfill. With the existing capacity in the Benton Crossing Landfill as well as the option for disposal for five years at the Pumice Valley Landfill, there is adequate landfill capacity for the project population. While the Project will generate an increase in the amount of solid waste disposed of at the

landfill, the Project would not result in the need to construct a new landfill or expand existing facilities. In addition, recycling will be strongly encouraged within the Project and the applicant will be required to comply with municipal laws and regulations regarding provision of recycling collection units.

The Project would comply with federal, state, and local statutes and regulations related to solid waste. The construction and operation of the Project would be required to adhere to all applicable federal, state, and local statues and regulations related to solid waste. Therefore, Project impacts regarding compliance with federal, state, and local statutes and regulations related to solid waste would be less than significant, and no further discussion of this issue is required.

IV. ENVIRONMENTAL IMPACT ANALYSIS
B. AESTHETICS

INTRODUCTION

This section addresses the subject of aesthetics with respect to the Project and includes a description of existing visual conditions and an evaluation of potential aesthetic effects associated with implementing the Project. Computer-generated visual simulations illustrating "before" and conceptual "after" visual conditions at the Project site as seen from three representative, public vantage points are presented as part of the analysis. Digitized photographs and computer modeling and rendering techniques were used to prepare the simulation images. In addition, this section addresses the subjects of nighttime illumination and daytime glare.

ENVIRONMENTAL SETTING

Regulatory Framework

Mammoth Lakes is a recreation resort community located in the Eastern Sierra and contains a plethora of mountain meadows, creeks, mountain vistas, forests, and wildlife. Visitors enjoy fishing, skiing, snowboarding, hiking, camping, bicycling, and other recreational pursuits throughout the year. To ensure the preservation of existing valuable visual resources and the Town's visual character, regulations and requirements have been integrated into the current General Plan as well as the Mammoth Lakes Municipal Code.

The 1987 General Plan is currently in the process of being updated following a four-year planning and review process. A Draft Program EIR was previously prepared and circulated regarding an earlier version of the General Plan Update. A Notice of Preparation (NOP) for the Draft Program EIR was distributed on April 25, 2003. A Draft Program EIR was prepared and distributed to the public for review from February to May 2005 for public comments. Based on the extent and range of comments received, the Town determined that the proposed General Plan should be revised to the extent that required recirculation of a Revised Draft Program EIR. The Revised Draft Program EIR was circulated for public review from October 31, 2005 to December 14, 2005. The Town adopted the 2007 General Plan on August 15, 2007 and is currently considering the Revised Final Program EIR on the General Plan Update for certification. Because the certification of the Revised Final Program EIR is an ongoing process, the standard for analysis used in this Draft EIR is based on both the 1987 General Plan and the 2007 General Plan. Therefore, the relevant policies that address aesthetics resources from both the 1987 and 2007 General Plans are addressed below.

As mentioned earlier in this Draft EIR, in the Introduction and Project Description, the Snowcreek Master Plan and development on the Project Site has been contemplated for more than three decades. The Snowcreek Master Plan was approved by the Board of Supervisors of Mono County in 1975. When the Project Site was incorporated into the Town in 1984, the General Plan and zoning code of the Town were

amended to incorporate the Master Plan; the resort development continued to be the vision for the Snowcreek area of the Town. This remains true in the 1987 General Plan, the Town Zoning Code and the recently adopted 2007 General Plan.

Mammoth Lakes Municipal Code Section 17.32.120 sets forth the design review process and authority. The Design Guidelines for the Town of Mammoth Lakes, in accordance with Mammoth Lakes Municipal Code Section 17.32.120, are a communication tool to assist the Town in guiding and evaluating renovation of existing and new development projects. The Mammoth Lakes Municipal Code also sets forth design criteria for Signs and Outdoor Lighting (Section 17.40 and Section 17.34, respectively).

1987 General Plan

Visual resources are addressed in the Conservation and Open Space Element of the Town of Mammoth Lakes General Plan. As discussed therein, the Town's dramatic visual setting is one of the major attractions to residents and visitors.

According to the 1987 General Plan, a viewshed is a visually significant area which may be viewed from the Town of Mammoth Lakes, along roadways to and within the community, and from other areas utilized by residents and visitors. Significant viewpoints in Mammoth Lakes include the ski slopes on Mammoth Mountain, Sherwin Bowl, Lake Mary Road, State Highway 203 east of Old Mammoth Road, Old Mammoth Road south of Mammoth Creek, the Gateway District – particularly along State Highway 203 and the Meridian extension and U.S. Highway 395. Significant vistas may also occur in the space between buildings and properties, called "subvistas," and should be retained where appropriate.

Several policies in the 1987 General Plan are applicable to the Project with respect to visual resources. Consistency with these policies is analyzed below under "Environmental Impacts."

General Plan (2007)

Visual resources are addressed in the Community Design Element of the 2007 Town of Mammoth Lakes General Plan. Similar to the 1987 General Plan, the 2007 General Plan addresses the Town's dramatic setting as one of the major attractions to residents and visitors. The policies in the 2007 General Plan support the retention of major landscape characteristics and unique natural features such as large trees, Mammoth Mountain, Mammoth Rock, Crystal Crag, the Bluffs, the Sherwin Ridge, Long Valley, Mammoth Knolls, and Mammoth Crest. Major view corridors and vistas toward these important landscape features are identified in the proposed General Plan, and are shown in Figure IV.B-1, Major View Corridors and Vistas.

The 2007 General Plan sets forth policies and implementation measures to ensure the preservation of the visual resources and visual character of the Town of Mammoth Lakes. Consistency with these policies and implementation measures is analyzed below under "Environmental Impacts."

Design Guidelines

The Design Guidelines for the Town of Mammoth Lakes (the "Design Guidelines") are "intended to bring a comprehensive and unified approach to the review of development projects so that integration of individual projects can create an attractive community."

The Design Guidelines are based on core community values to guide future development to ensure that the Town retains its uniqueness as a mountain resort. The community values include the following:

- Unique eclectic character;
- Identifiable neighborhoods;
- Maintenance of important views and vistas;
- Natural beauty;
- Healthy forests;
- Understandable, convenient and complete pedestrian, bike and transit connections;
- Building scale and proportions appropriate to a pedestrian environment;
- Use of natural, regional materials in the built environment;
- Encouragement of integrated systems design; and
- Environmentally sensitive design.

Each of the community values has associated design principles detailed in the Design Guidelines. The design principals are expressed throughout the Design Guidelines in the form of specific objectives and guidelines. The six objectives in the Design Guidelines include the following:

- **Site Design.** Proposed developments shall address the opportunities and limitations of the site and its surroundings and should integrate the relationship between the site's topography, existing vegetation, other natural features, adjacent properties, views, solar access, the uses proposed and the development plan.

- **Architectural.** The architectural style of buildings within the Town of Mammoth Lakes is currently diverse and of an eclectic quality. Residents and property owners identify with this character and would like to see it maintained, while improving the general quality of the built environment, pedestrian spaces and pedestrian relationships to buildings.

- **Landscape and Public Space.** The objective of any landscaping plan shall be to create a pleasant setting and to preserve and enhance the natural landscape character of the development area. The scale and overall design shall be such that new vegetation and landforms blend with the natural environment.

  Removal of trees, shrubs, and non-hazardous native plant materials generally shall be limited to that essential for development of the site.

  Each development application shall evaluate any and all existing trees on-site greater than six inches in diameter at shoulder height, and substantiate proposed removal to the Town of Mammoth Lakes. New vegetation should be of substantial size and variation to resemble a natural pre-disturbance condition.

- **Lighting.** Outdoor lighting plays a significant role in creating safe pedestrian environments, establishing character in the town and highlighting special features of the built environment. Exterior lighting must conform to the Municipal Code Chapter 17.34 – Ordinance No 03-09 "Outdoor Lighting" in addition to these Design Guidelines.

- **Signage.** Signage should reflect the character of the neighborhood with regard to materials, form and use.

  Signage form and quality should relate directly to its purpose, context and location.

  Signage should inform and direct, but in a manner and style which creates a memorable environment, particularly within pedestrian zones. As such, signage provides an opportunity to introduce whimsical, historical and/or sculptural character.

- **Outdoor Sales/Storefront Displays.** Outdoor sales, public events, and storefront displays provide the opportunity for businesses and event sponsors to create an attractive environment, adding interest and activity to the streetscape, and attracting residents/tourists and pedestrians/shoppers.

Mammoth Lakes Municipal Code

The Mammoth Lakes Municipal Code sets forth rules and regulations governing the design, use, and display of lighting and signs within the Town of Mammoth Lakes. It is acknowledged in the Mammoth Lakes Municipal Code that the economy of the Town is dependent upon aesthetics, as it is a tourist-based economy. Lighting and signs have the potential to substantially impact the environment and, as such, affect the local economy.

Outdoor Lighting

Chapter 17.34 of the Mammoth Lakes Municipal Code sets forth rules and regulations for outdoor lighting within the Town of Mammoth Lakes. The purpose of Chapter 17.34 is to accomplish the following:

- To promote a safe and pleasant nighttime environment for residents and visitors;
- To protect and improve safe travel for all modes of transportation;
- To prevent nuisances caused by unnecessary light intensity, direct glare, and light trespass;
- To protect the ability to view the night sky by restricting unnecessary upward projection of light;
- To phase out existing non-conforming fixtures that violate this chapter, including those owned by the Town and other public agencies; and,
- To promote lighting practices and systems to conserve energy.

Section 17.34.060 of the Municipal Code requires that an Outdoor Lighting Plan be submitted in conjunction with: an application for design review approval; a conditional use permit; subdivision approval; or, a building permit for a new structure or addition(s) of 25 percent or more in terms of gross floor area, seating capacity, or parking spaces (either with a single addition or cumulative additions). An Outdoor Lighting Plan is required for all new outdoor lighting installations on commercial (including four or more units of multi-family residences), industrial, public and institutional properties.

Signs

Chapter 17.40 of the Mammoth Lakes Municipal Code sets forth rules and regulations governing the display of signs within the Town of Mammoth Lakes. The purpose of Chapter 17.40 is to achieve the following:

- Recognize that commercial signs are a necessary means of useful communication for the convenience of the public;
- Regulate the number, location, height, size, design, construction, color and illumination of signs in order to maintain and improve the image, attractiveness and environmental qualities of the town;
- Preclude sign size and placement from conflicting with the principal permitted use of the site or adjoining sites;

- Regulate sign size in relationship to the scale of the street frontage and/or building face where such signage is to be placed;

- Enhance the attractiveness and economic well-being of the town as a place to live, vacation and conduct business while cultivating the town's premier status in an increasingly competitive resort market;

- Protect, preserve and enhance the unique aesthetic character, beauty and charm of the town, and thereby encourage the continued development of tourism within the town;

- Protect the public from hazardous conditions that can result from commercial signs which are structurally unsafe, obscure the vision of motorists, create dangers to pedestrian traffic, or which compete or conflict with necessary traffic signals and warning signs;

- Avoid the creation of a "tourist trap" atmosphere which can result when business enterprises compete for attention through the use of commercial advertising signs, and promote an overall visual effect which has a minimum of clutter;

- Eliminate distracting lighting and excessive glare by reasonably limiting the illumination of signs to subdued, adequately shielded or concealed light sources;

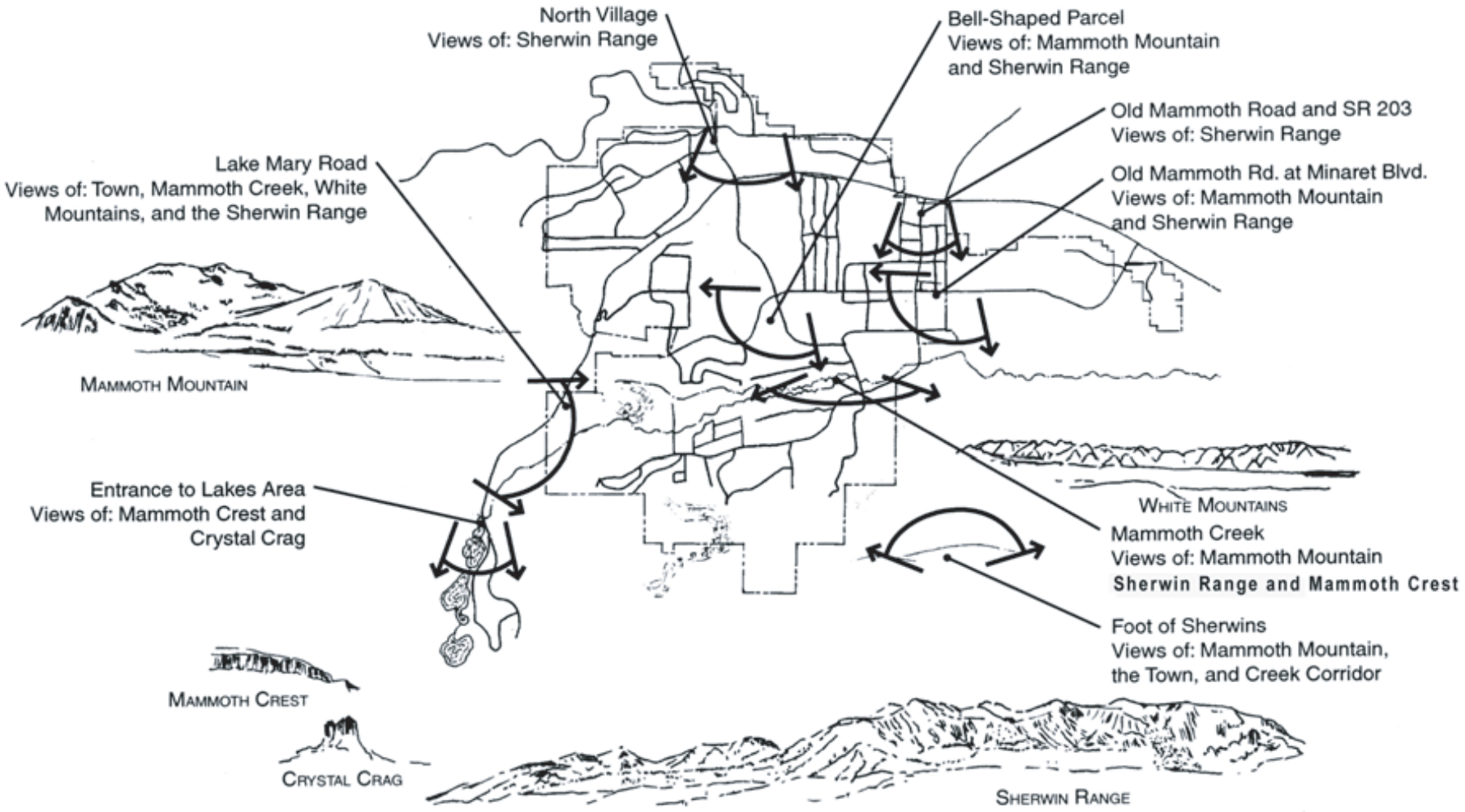
- Encourage the construction of commercial signs of natural materials which are aesthetically pleasing and are compatible with natural surroundings and the buildings to which they identify; and,

- Retain permit affordability in order to promote maximum applicant revenues being used for creative signage.

Existing Visual Character

Project Site

The Project site is currently largely undeveloped and is characterized by an open meadow vegetated with abundant sagebrush scrub, grasses, and areas of scattered boulders. In addition to sagebrush, some Jeffrey pines exist on the portion of the Project site north of Old Mammoth Road. The topography of the Project site is relatively flat with a gentle slope towards the northeast. Fairway Drive extends through the Project site connecting the existing Snowcreek V development south of the Project site with Old Mammoth Road. The Project site is surrounded by existing development (See Figure III-1) to the north, west, and southwest. Some residential uses are visible from the Project site to the north of Old Mammoth Road and south of the site along Fairway Drive. The areas directly south and east of the site are undeveloped.



Source: Natural Resources Conservation & Open Space Plan for the Town, September 2000, prepared by Diane Bonanno and Ints Luters.

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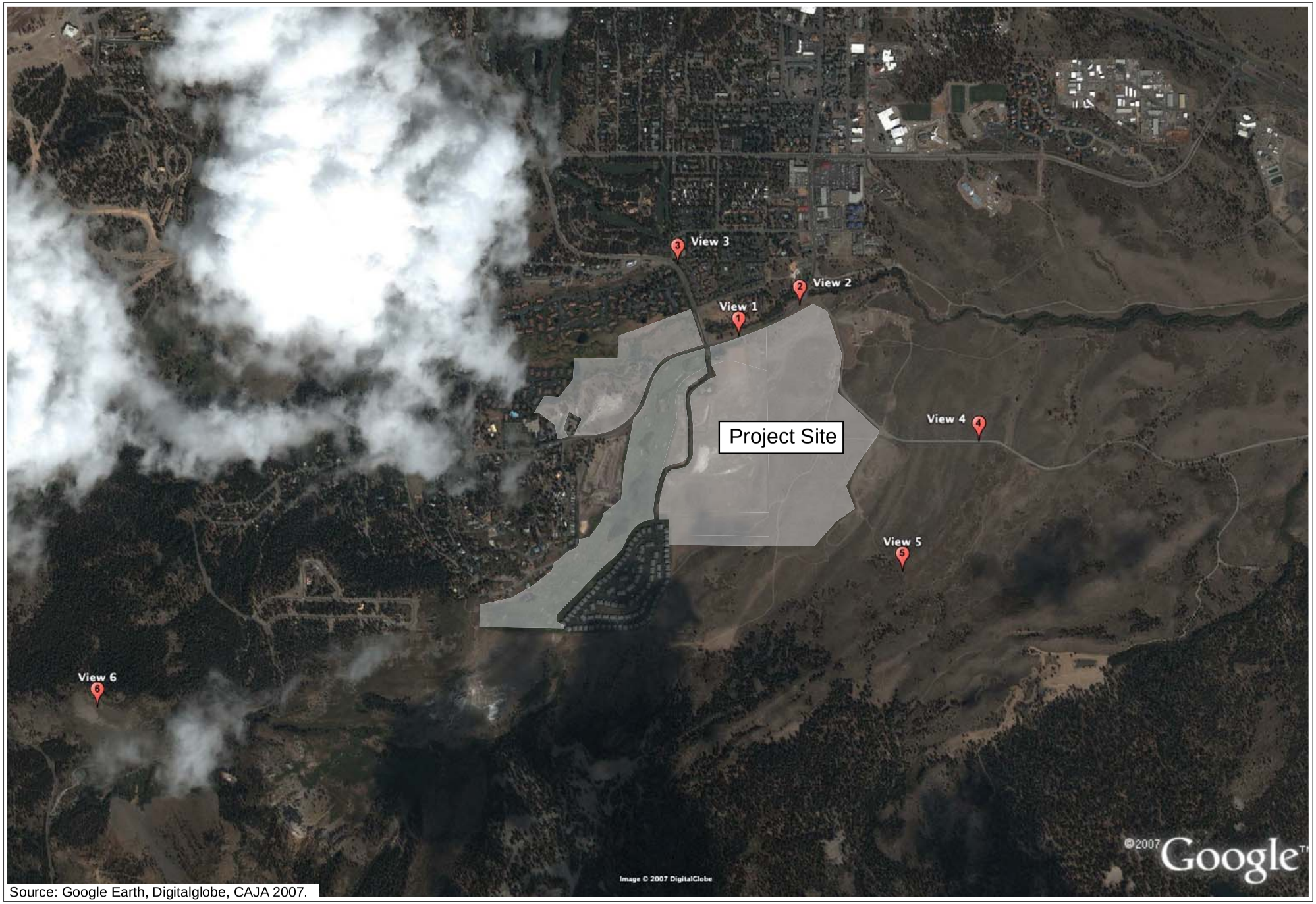
Figure IV.B-1
Major View Corridors and Vistas

Surrounding Area

Existing Viewsheds

Viewsheds refer to the visual qualities of a geographical area that are defined by the horizon, topography, and other natural features that give an area its visual boundary and context, or by development that has become a prominent visual component of the area. In the area surrounding the Project site, the existing viewsheds are defined primarily by major view corridors and vistas (see Figure IV.B-1) as well as the nearby roadways (e.g., Old Mammoth Road, Sherwin Creek Road, and Minaret Road). The major view corridors and vistas that could be potentially affected by the development of the Project as well as other viewpoints of interest are identified and discussed in detail below. The locations of all of these viewpoints are depicted in Figure IV.B-2, Viewpoint Location Map.

Public views are those which can be seen from vantage points that are publicly accessible, such as streets, freeways, parks and vista points. These views are generally available to a greater number of persons than are private views. Private views are those which can be seen from vantage points located on private property. Private views are not necessarily considered to be impacted when interrupted by land uses on adjacent blocks.



Source: Google Earth, Digitalglobe, CAJA 2007.

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NORTH

Figure IV.B-2
Viewpoint Location Map

Back of Figure IV.B-2

Public Views and Scenic Vistas

Throughout the Town of Mammoth Lakes, there are several places where views of the Project site are publicly accessible. These views could potentially be affected by the Project and are depicted as Views 1 through 6 in Figures IV.B-3 through IV.B-8 and are identified in Figure IV.B-2. To more realistically represent the views, all viewpoint vantages are shown under two conditions: summer and winter.

Old Mammoth Road and Minaret Road Looking South (View 1)

View 1, Figure IV.B-3, is located on Old Mammoth Road just east of its intersection with Minaret Road. This view looks south directly into the Project site. Views from this area include a landscaped turf area in the foreground, a grove of trees to the west, and rolling hills and mountains directly to the south. A log fence is located along the edge of Old Mammoth Road separating the open space areas from the roadway. Although this view is dominated by the hilly terrain in the foreground and mountains in the distant background, views of the landscaped turf area give an impression of development in the area.

Old Mammoth Road and Sherwin Creek Road Looking South (View 2)

View 2, Figure IV.B-4, is located on Old Mammoth Road west of its intersection with Sherwin Creek Road. A log fence is located along the edge of Old Mammoth Road separating the open space areas from the roadway. Only very distant development is seen from this view and the dominate views from this location are of natural open space areas dominated by hilly terrain in the foreground and mountains in the distant background.

Minaret Road Looking South (View 3)

As shown in Figure IV.B-5, View 3 is located north of the Project site looking south from Minaret Road near its intersection with Chateau Road. The near view is dominated by development, including a two-lane roadway, residential uses, berms, and landscaping. Distant views are dominated by the mountains.

Sherwin Creek Road Looking West (View 4)

As shown in View 4, Figure IV.B-6, views of the Project site looking west from Sherwin Creek Road are dominated by open meadows, rolling foothills, and the Mammoth Mountain to the west. Ski runs on the Sherwin Range are visible under both summer and winter conditions. Views in the distant foreground include some scattered development; however, the predominating foreground views are of undeveloped scrub grasslands, boulders, distant trees, and mountains.

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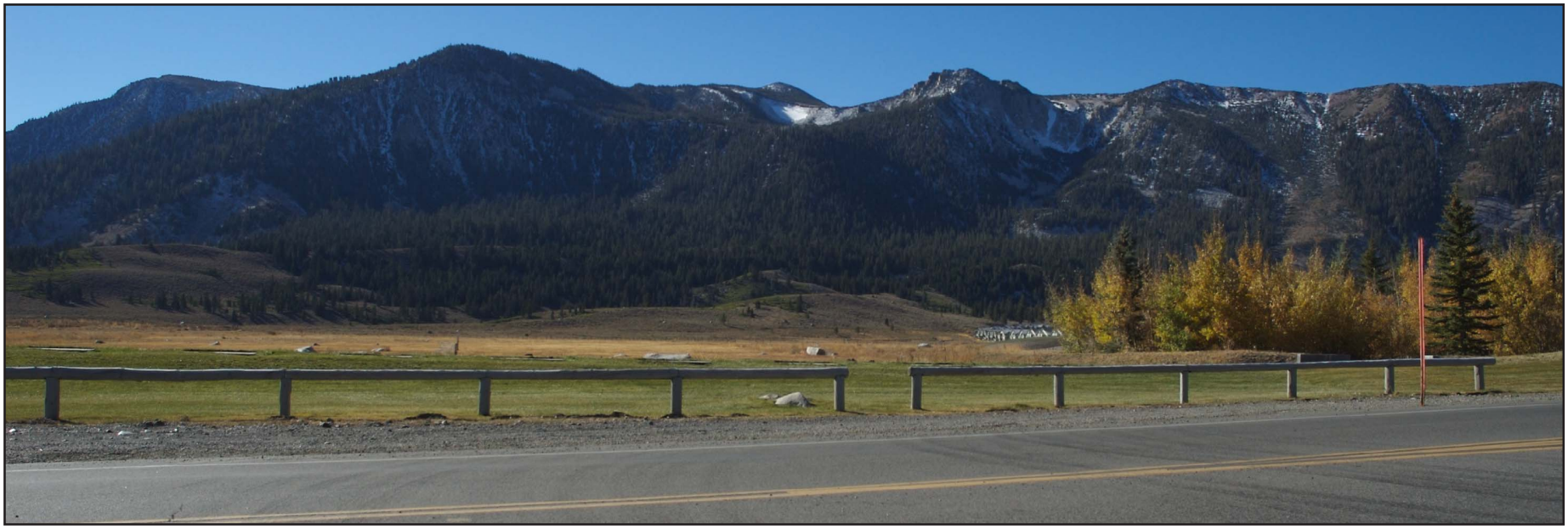
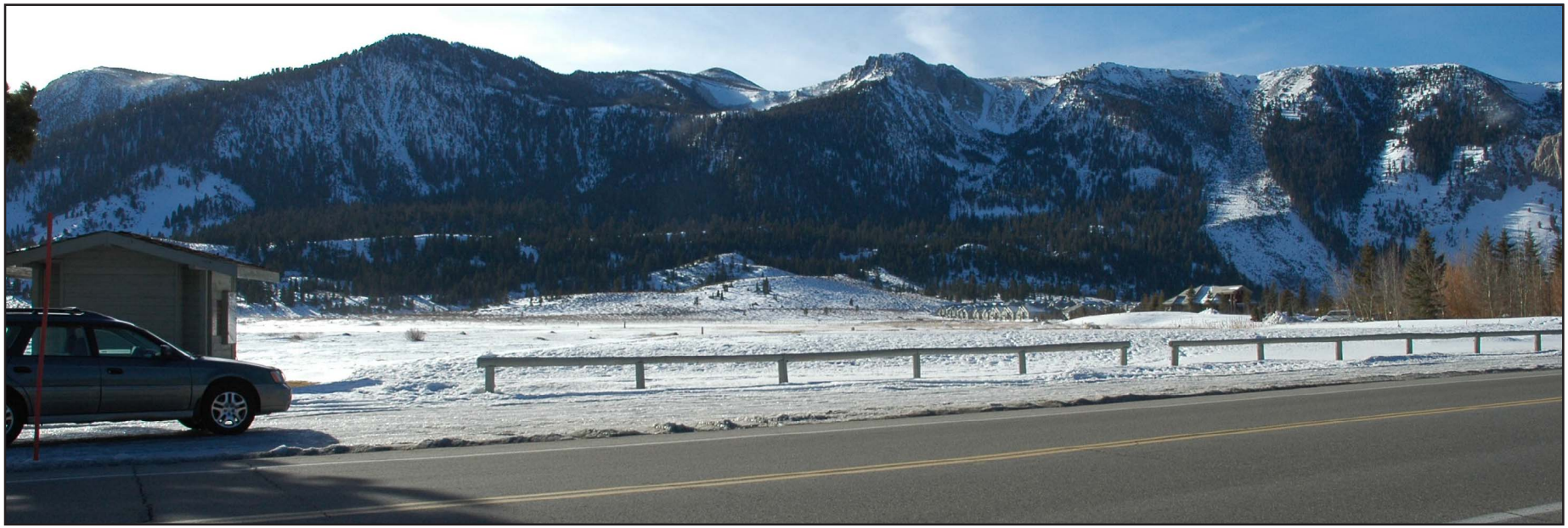


View 1: Old Mammoth Road & Minaret Road, Looking South (Summer)



View 1: Old Mammoth Road & Minaret Road, Looking South (Winter)

Source: Christopher A Joseph & Associates, 2007.

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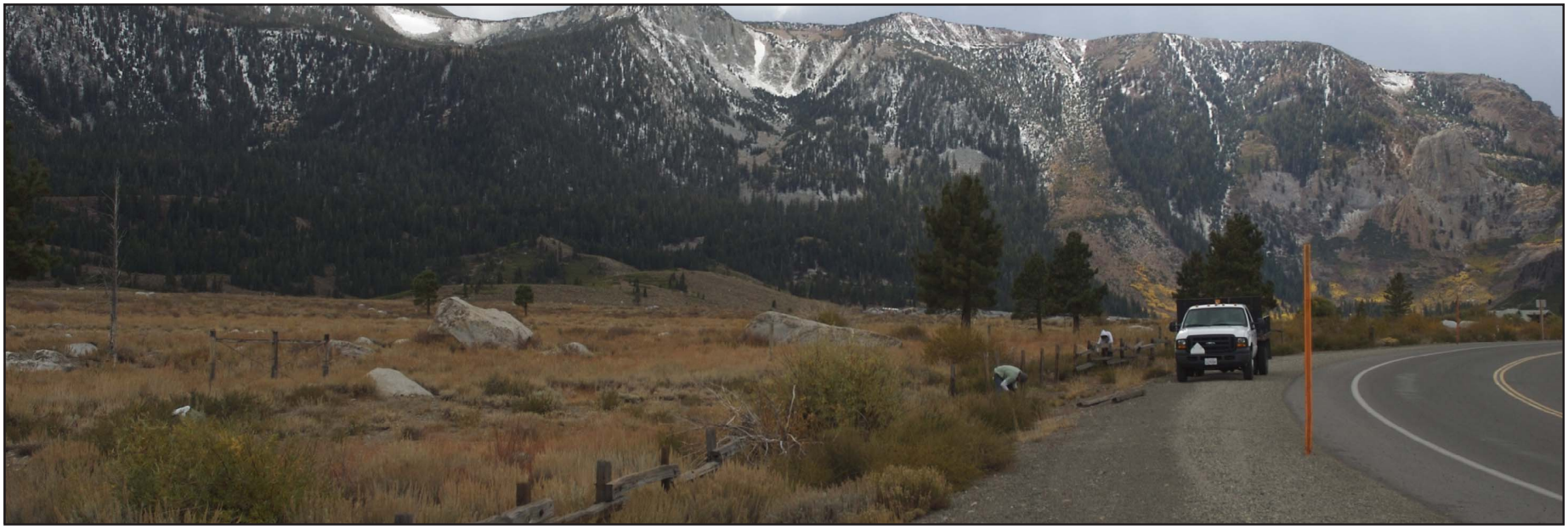
Figure IV.B-3
View 1 Old Mammoth Road
& Minaret Road, Looking South

Back of Figure IV.B-3: View 1, Old Mammoth and Minaret Road Looking South



View 2: Old Mammoth Road & Sherwin Creek Road, Looking South (Summer)

View 2: Old Mammoth Road & Sherwin Creek Road, Looking South (Winter)

Source: Christopher A Joseph & Associates, 2007.

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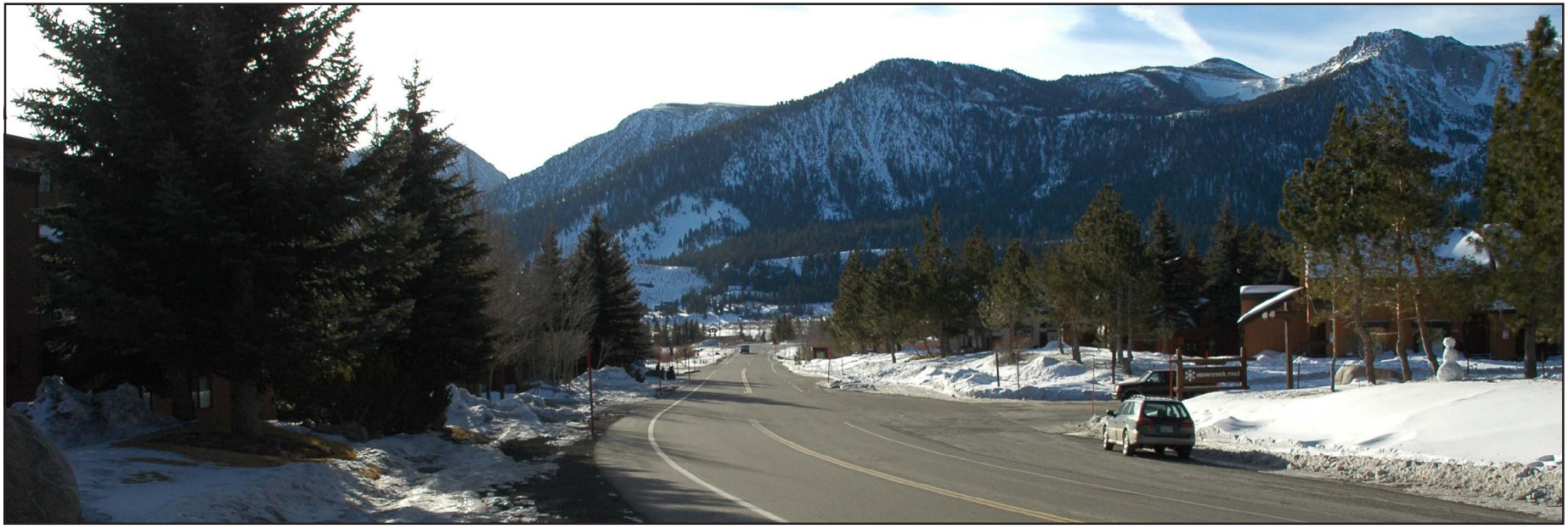
Figure IV.B-4
View 2, Old Mammoth Road
& Sherwin Creek Road, Looking South

Back of Figure IV.B-4: View 2, Old Mammoth and Sherwin Creek Road Looking South

View 3: Minaret Road, Looking South (Summer)



View 3: Minaret Road, Looking South (Winter)

Source: Christopher A Joseph & Associates, 2007.

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Figure IV.B-5
View 3, Minaret Road, Looking South

Back of Figure IV.B-5: View 3, Minaret Road Looking South

View 4: Sherwin Creek Road, Looking West (Summer)

View 4: Sherwin Creek Road, Looking West (Winter)

Source: Christopher A Joseph & Associates, 2007.

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Figure IV.B-6
View 4, Sherwin Creek Road, Looking West

Back of Figure IV.B-6: View 4, Sherwin Creek Road Looking West

U.S Forest Service Lands to the West of Sherwin Creek Road (View 5)

View 5 is located to the west of View 4 on U.S. Forest Service lands. As shown in Figure IV.B-7, views of the Project site looking northwest from these lands include near and far views of rolling tree covered hills. Some development in the Town is visible in the distance. The far views are dominated by the mountains to the west. Ski runs on the mountains are visible under both summer and winter conditions.

Panorama Dome Trail Looking East (View 6)

As shown in View 6, Figure IV.B-8, views of the Project site are available from a hiking trail on the Panorama Dome in the Sherwin Range to the southwest of the site. The Project site is visible to the northeast in the distance in the near meadow areas of the view. A large resort development is visible in the mid-ground. Development in the Town of Mammoth Lakes is visible to the north among the trees. Mountains are visible in the distance.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the State *CEQA Guidelines*, the Project could have a significant environmental impact if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, or historic buildings within a scenic highway;
- Significantly degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

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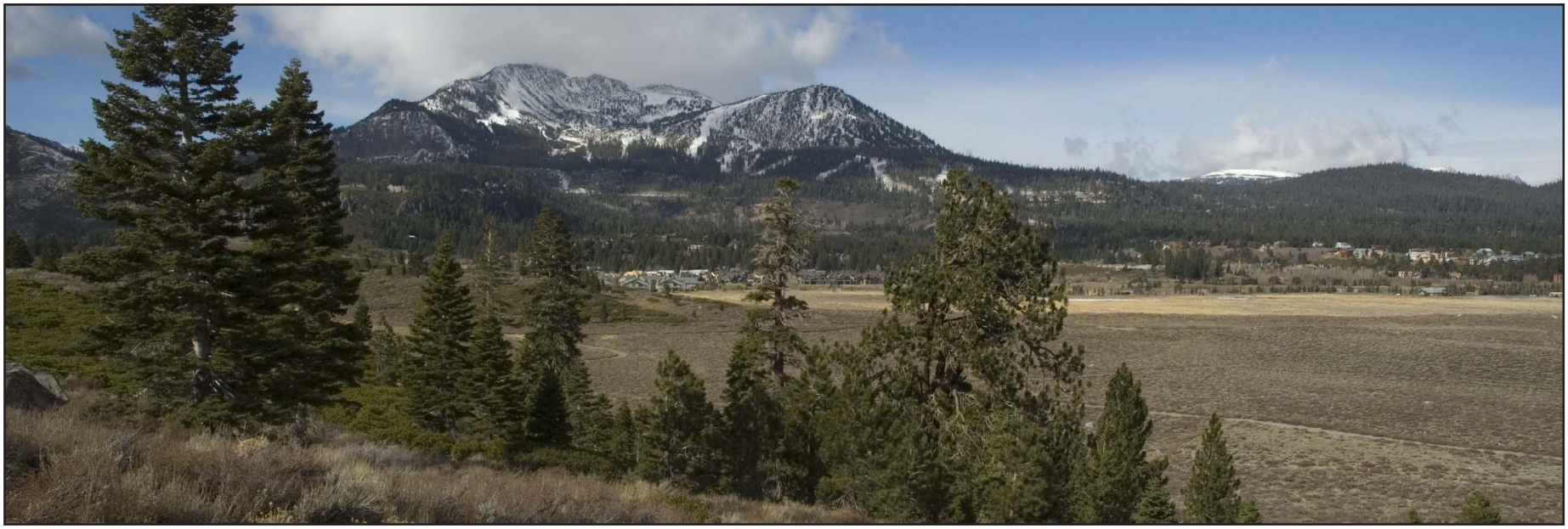

View 5: U.S. Forest Service Lands to the West Sherwin Creek Road (Summer)

View 5: U.S. Forest Service Lands to the West Sherwin Creek Road (Winter)

Source: Christopher A Joseph & Associates, 2007.

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Figure IV.B-7
View 5, U.S. Forest Service Land to the West of Sherwin Creek Road

Back of Figure IV.B-7 View 5 U.S Forest Service Lands to the West of Sherwin Creek Road

View 6: Panorama Dome Trail, Looking East (Summer)

View 6: Panorama Dome Trail, Looking East (Winter)

Source: Christopher A Joseph & Associates, 2007.

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Figure IV.B-8
View 6 Panorama Dome, Looking East

Back of Figure IV.B-8: View 6 Panorama Dome Trail Looking East

Project Impacts and Mitigation

Impact AES-1a Consistency with Policies (1987 General Plan)

As discussed above, several policies in the 1987 General Plan are applicable to the Project with respect to visual resources. A consistency analysis of the Project with applicable policies contained within the 1987 General Plan is presented in Table IV.B-1, Consistency with 1987 General Plan Applicable Aesthetics Policies.

Table IV.B-1
Consistency with 1987 General Plan Applicable Aesthetics Policies

Policy	Consistency Analysis
LAND USE AND PUBLIC FACILITY AND SERVICES ELEMENT	
Open Space Policies	
4 The unique physical and visual features of the Mammoth Lakes Community should be maintained by an open space program and Development Code criteria which preserves the unique alpine qualities of the Town and wildlife habitat, including major rock outcroppings, forest canopies and mixed-aged stands of trees.	**Consistent.** The Project would cluster development in the interior of the Project site and reserve open space areas around the perimeter. Although few trees currently exist on the Project site, the site would be landscaped with trees resulting in an extension of the alpine and forested qualities throughout the Town to the Project site. Also, the Project will not affect any major rock outcroppings or forest canopies.
7 The Town shall maximize the visual quality of designated passive open space areas by careful screening of those development areas which can be viewed from the open space areas and by the maximum retention of the forest canopy and understory through design review criteria in the Town's Development Code.	**Consistent.** The Project would organize residential uses into a series of clustered neighborhoods (including low-, medium-, and high-density residential development) interspersed among outdoor use/open space areas, commercial and resort uses, and recreational amenities. The Project would provide for sensitive transitions between residential and other land uses through open space dedication and design. The Project is set back in excess of approximately 1,950 feet from Old Mammoth Road. Additionally, landscaping will provide screening of portions of the Project.
8 The visual impact of active recreation areas should be minimized through cooperation with the U.S. Forest Service and other appropriate agencies in areas outside the Town's jurisdiction and through incentives in the Town's Development Code, for areas within the Town's jurisdiction. The Town shall encourage the Forest Service to permit active recreational uses, including ice skating rinks, golf courses and similar community recreational facilities when those facilities cannot reasonably be located on the private land base.	**Consistent.** The Project includes active recreational uses including an ice rink, Golf Course, and access to hiking, biking, and cross-country ski trails. The Golf Course would be landscaped with some native vegetation which would serve to blend the Golf Course into the existing open space areas on the edges of the Project site.

Table IV.B-1
Consistency with 1987 General Plan Applicable Aesthetics Policies

Policy	Consistency Analysis
PARKING AND TRANSPORTATION ELEMENT	
Parking	
1.20 Consider the visual impacts of parking lots during project review. Implement design standards to locate parking to the rear of buildings, utilize land forms to reduce the bulk of structures, or provide substantial screening of parking areas.	**Consistent.** The Project considers the impacts of parking lots by providing understructure parking with only minimal parking in surface lots. Project building design would be consistent with height and bulk as permitted on the Project site. Screening of all surface parking lots would be provided by landscaping consistent with other site landscaping. Landscaping plans would be reviewed by the Town for consistency with Design Guidelines.
Inter-Jurisdictional Coordination	
2.2 New roads and roadway improvements shall be located, designed, constructed, and maintained in a manner that prevents adverse impacts to air quality, water quality, and significant biological and scenic resources.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy related to protection of air quality, water quality, biological resources, and scenic resources. The Project would provide transit connections, pedestrian and bicycle pathways, and on-site services to reduce the number of vehicular trips and improve air quality. The Project would include adequate retention of surface runoff to protect water quality. The Project would avoid wetland and riparian habitat and incorporate measures to protect special status species. All roadways would be landscaped consistent with other site landscaping. Project design, including landscaping plans, would be reviewed by the Town for consistency with Design Guidelines.
2.4 New and replacement road lighting shall use fixtures and light sources that are shielded or constructed so that the source of illumination is not readily visible at a distance, and shall be energy efficient, without compromising traffic safety.	**Consistent**. The proposed Project would include an Outdoor Lighting Plan to ensure compliance with the Town's Lighting Ordinance (Chapter 17.34 of the Municipal Code). All fixtures would be down-shielded to avoid excessive illumination. Lighting would be designed to ensure safety and would be designed to minimize glare and reflection.
CONSERVATION AND OPEN SPACE ELEMENT	
Natural Vegetative Resources	
1 The Town shall preserve the resort-alpine character of Mammoth Lakes through the adoption of tree preservation standards which retain heritage trees and groves where reasonable, and retain to the maximum extent feasible, the forest canopy and forested character of the Town. Native tree species should be planted to help offset the loss of trees unavoidably removed during construction. (Parks and Recreation Element 1A-3).	**Consistent.** The Project design would create a scale, form, and mass suited to the resort-alpine character of the site and the adjacent land uses. Few trees exist on the Project site and none of the on-site trees are heritage trees, nor are there any heritage groves. Grading plans are not available for the Project at this point; however, as part of the approval process, the Town will review the grading plans to assess the need for removal of any trees. Additionally the Town will review all landscaping plans. To the maximum extent possible, native trees and shrubs are used to revegetate disturbed areas, to buffer or frame views, to allow summertime shading of outdoor places,

Table IV.B-1
Consistency with 1987 General Plan Applicable Aesthetics Policies

Policy	Consistency Analysis
	to allow transition in scale and to soften building massing, and to introduce decoration and color into outdoor use areas. Planting on the project site would use native conifers, deciduous trees, and shrubs and would be consistent with Town Code.
Visual Resources and Community Design	
1 The Town shall adopt and enforce community design standards to help preserve and enhance the aesthetic and biological environment.	**Consistent.** Prior to Town approval, the final Project design would be reviewed for consistency with the Town's Design Guidelines.
2 These standards shall include design criteria to assure proposed developments are located, sited and designed to be subordinate to the pre-existing character of the site to the maximum extent possible.	**Consistent.** The Project is organized into a series of clustered residential neighborhoods interspersed among outdoor use/open space areas and recreational amenities. The Project would retain the natural contours of the site and provide for sensitive transitions between residential and other land uses through open space dedication and design and would preserve the existing character of the site.
4 The Town shall develop aesthetic controls to be applied to utility structures, road signs, traffic signals, lighting, overhead wires and utility poles.	**Consistent.** Utility structures, road signs, and lighting would be subject to review under the Town's Design Review Guidelines prior to Town approval of final Project designs.
6 Primary Scenic Areas and Scenic Resources shall be protected through design criteria and incentives and disincentives in the Town Development Code including: a) location of structures, or modification of building height and bulk, to reduce impact to views of primary scenic areas and resources. b) control of development on prominent ridgelines, bluffs and exposed hillsides, c) use of building materials, and colors which blend rather than contrast with the surrounding visual resources, d) limiting removal of vegetation, particularly mature trees, e) locating sensitive visual, biological and geological resource areas within Special Conservation Planning districts.	**Consistent with the 1987 General Plan but inconsistent with the Town Development Code. Consistent with Town Development Code if the Zone Code Amendment is approved.** The Town will review the location of the proposed structures, bulk/massing, use of building materials, colors, and landscaping to ensure consistency with the Town Development Code. Although the Hotel would not exceed 120 feet in height (the maximum allowed by the Fire Code) and would be located at a distance of approximately 1,950 feet from Old Mammoth Road, public views to the surrounding mountains would be altered. Residential buildings would be two- or three-stories in height and would not obscure views of the surrounding mountains. The Town's Zoning Code states that any commercial structure, such as a hotel, where the majority of the ground floor is devoted to understructure parking, the Planning Commission may approve an increase of up to 10 feet in height for a total of 45 feet (17.20.040.G.4). The height of the Hotel would not be consistent with the height limitation in the Town's zoning code, but would be consistent if the applicant's proposed Zone Code Amendment is approved.

Table IV.B-1
Consistency with 1987 General Plan Applicable Aesthetics Policies

Policy	Consistency Analysis
7 Preserve the important scenic vistas which occur along Old Mammoth Road, Meridian Boulevard and other defined areas by retaining sufficient minimum building setbacks and adoption of viewshed protection criteria and requirements in the Town Development Code.	**Consistent with the General Plan but inconsistent with the Town Development Code. Consistent with Town Development Code if the Zone Code Amendment is approved.** The 1987 General Plan contemplated the build-out of the Snowcreek Master Plan and an EIR was prepared in connection with the adoption of the 1987 General Plan. The height of the Hotel is a significant conceptual change to the Project; however the location of the Hotel is setback approximately 1,950 feet from Old Mammoth Road, thus reducing its visibility from this viewpoint. Residential buildings would be two- or three-stories in height and would not obscure views of the surrounding mountains. With respect to the development of the Project (with the exception of the height of the Hotel), the policy of the Town has been to permit development of the character and scale that has been contemplated. The Hotel is the tallest structure on the site and would not exceed 120 feet in height (the maximum allowed by the Fire Code). Although, the Hotel would be setback approximately 1,950 feet from Old Mammoth Road, public views of the site would be altered and views to the surrounding mountains would also be altered. While there is no direct conflict with the 1987 General Plan, this Project feature was not contemplated at the time the 1987 General Plan was adopted. As stated above, although there is a direct conflict with the Town's Zoning Code, if the Town Council approves the Zone Code Amendment, this inconsistency would be eliminated.

As indicated in Table IV.B-1 above, the Project would be generally consistent with most of the applicable policies associated with aesthetics in the 1987 General Plan with respect to the identified viewpoints. However, as also stated n Table IV.B.1, the Hotel element of the Project would not be consistent with 1987 General Plan policies pertaining to scenic vistas because it would alter the visual character of the site, which would be apparent to viewers looking toward the Sherwin Range from public areas near the Project site. The Hotel element of the Project would also be inconsistent with the height limitation contained in the Town's Zoning Code unless the Town Council approves the requested Zone Code Amendment. Inconsistency with a policy may indicate a significant physical impact, but the inconsistency is not itself an impact. Similarly, consistency with a policy does not necessarily mean there is no environmental impact. It is difficult to quantify and judge aesthetic impacts, which can be quite subjective. Although the Project has been previously considered for development on this site, given the character of the site and the fact that the aesthetic impact of a 120 foot Hotel has not been previously studied in a CEQA compliance document, the Project would result in significant impacts to scenic vistas

by altering the visual character of the site, which would be apparent to viewers looking south toward the Sherwin Range from public areas near the Project site. Therefore, development of the Project would create an impact for which there are no mitigation measures available and this impact would be considered ***significant and unavoidable***.

Impact AES-1b Consistency with Policies (2007 General Plan)

As discussed above, the 2007 General Plan sets forth policies and implementation measures to ensure the preservation of the visual resources and visual character of the Town of Mammoth Lakes. A consistency analysis of the Project with applicable policies contained within the proposed General Plan is presented in Table IV.B-2, Consistency with 2007 General Plan Applicable Aesthetics Policies.

Table IV.B-2
Consistency with 2007 General Plan Applicable Aesthetics Policies

Policy	Consistency Analysis
COMMUNITY DESIGN ELEMENT	
Celebrate Public Spaces	
C.2.A Create well-designed and significant public spaces in resort/commercial developments to accommodate pedestrians and encourage social interaction and community activity.	**Consistent.** Public outdoor spaces would be designed to emphasize the natural beauty of the Town and surrounding areas and complement the buildings' design features and overall site plan.
C.2.D Preserve and enhance special qualities of districts through focused attention on land use, community design and economic development.	**Consistent.** The Project would complement the design of the existing Snowcreek Master Plan area by being consistent with design for the area, proposing land uses in an efficient fashion, and contributing to the resort environment of the Town.
C.2.E Ensure that each district center is an attractive destination that is comfortable and inviting with sunny streets, plazas and sidewalks.	**Consistent.** See response to Policy C.2.D. The Project would include a pedestrian and bicycle system with interior trails and some sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods.
Celebrate the Spectacular Natural Surroundings	
C.2.I Achieve highest quality development that complements the natural surroundings by developing and enforcing design standards and guidelines.	**Consistent.** As discussed in more detail below, the Hotel element of the Project would exceed the height limitation in the Town's Zoning Code and may result in significant unavoidable impacts to scenic vistas. The Project is subject to design review by the Town Planning Department, other Town departments and divisions, and outside agencies. As part of the approval process, the Town will review the location of the proposed structures and bulk/massing to determine if this impact can be reduced, and, if so, will work with the Project applicant to reduce the impacts to the extent feasible, and as part of such review will evaluate the use of building materials, colors, and landscaping to ensure consistency with the Town Development Code. Landscaping would incorporate some native trees and shrubs to revegetate disturbed areas, to buffer or frame views to allow summertime shading of outdoor places, to allow

Table IV.B-2
Consistency with 2007 General Plan Applicable Aesthetics Policies

Policy	Consistency Analysis
	transition in scale and to soften building massing, and to introduce decoration and color into outdoor use areas. Planting on the Project site would use native conifers, deciduous trees, and shrubs.
C.2.J Be stewards in preserving public views of surronding mountains, ridgelines and knolls.	**Consistent with the General Plan but inconsistent with the Town Development Code. Consistent with Town Development Code if the Zone Code Amendment is approved.** The majority of the Project would not exceed the height limitation in the Town's Zoning Code, Residential buildings would be two- or three-stories in height and would not obscure views of the surrounding mountains, although they would obscure some views of the meadows and foothills in the distant foreground. However, the location and massing of the proposed structures would be consistent with the Town's Design Guidelines and the General Plan policies under Neighborhood and District Character, Snowcreek. The proposed 2007 General Plan Update states that in the Snowcreek district, "strong vertical elements are encouraged." If the proposed 2007 General Plan Update is adopted by the Town Council, it may be that this 120 foot height element could be determined to be consistent with the policies of the 2007 General Plan Update with regard to aesthetics. Additionally, the Project proposes a Zone Code Amendment to revise the Zoning Ordinance. If approved, the height of the Hotel would be consistent with the height limitation in the Town's Zoning Code.
C.2.L Create a visually interesting and aesthetically pleasing built environment by requiring all development to incorporate the highest quality of architecture and thoughtful site design and planning.	**Consistent.** See response to Policy C.2.I.
C.2.M Enhance community character by ensuring that all development, regardless of scale or density, maximizes provision of all types of open space, particularly scenic open space.	**Consistent.** The Project would organize residential uses into a series of clustered neighborhoods (including low-, medium-, and high-density residential development) with open, landscaped areas interspersed among commercial and resort uses, and recreational amenities. The Project would provide for sensitive transitions between residential and other land uses through open space dedication including the golf course and design.
C.2.N Plan the siting and design of buildings to preserve the maximum amount of open space, trees and natural features to be consistent with themes and district character.	**Consistent.** The Project design would create a scale, form, and mass suited to the resort-alpine character of the site and the adjacent land uses. The Project would cluster development to preserve and maximize open, landscaped areas interspersed among commercial and resort uses, and recreational amenities. Few trees exist on the Project site. As part of the approval process, the Town will review the grading plans to assess the need for removal of any trees.

Table IV.B-2
Consistency with 2007 General Plan Applicable Aesthetics Policies

Policy	Consistency Analysis
	Additionally the Town will review all landscaping plans to ensure that some native trees and shrubs are used to revegetate disturbed areas, to buffer or frame views to allow summertime shading of outdoor places, to allow transition in scale and to soften building massing, and to introduce decoration and color into outdoor use areas.
C.2.O Site development adjustments may be considered to preserve significant groups of trees or individual specimens. Replanting with native and compatible non-native trees to mitigate necessary tree removal is required.	**Consistent.** There are no significant groups of trees or individual specimens on the Project site. Development on the portion of the site north of Old Mammoth Road would be located out of the riparian corridor and would affect some trees and vegetation. Landscaping would include replanting with native and compatible non-native trees. It is the intent of the Project that all Native/Naturally-occurring trees remain on-site in their current location, subsequent to an aborist's review of the health and status of the tree.
Distinctive Architecture	
C.2.T Use natural, high quality building materials to reflect Mammoth Lakes' character and mountain setting.	**Consistent.** See response to Policy C.2.D.
C.2.U Require unique, authentic and diverse design that conveys innovation and creativity and discourages architectural monotony.	**Consistent.** See response to Policy C.2.D. and C.2.I.
Comfortable Building Height, Mass, and Scale	
C.2.V Building height, massing and scale shall complement neighboring land uses and preserve views to the surrounding mountains.	**Consistent with the General Plan but inconsistent with the Town Development Code. Consistent with Town Development Code if the Zone Code Amendment is approved.** See response to Policy C.2.J.
C.2.W Maintain scenic public views and view corridors as shown in Figures 1 and 2 that visually connect community to surroundings.	**Consistent with the General Plan but inconsistent with the Town Development Code. Consistent with Town Development Code if the Zone Code Amendment is approved.** See response to Policy C.2.J.
C.2.X Limit building height to the trees on development sites where material tree coverage exists and use top of forest canopy in general area as height limit if no trees on site.	**Consistent.** There is no material tree coverage on the Project site. Therefore, development of any height on the portion of the site south of Old Mammoth Road would not conflict with this policy. Development on the portion of the site north of Old Mammoth Road would not be in excess of forest canopy in the general area.
Community Design and Streetscape	
C.3.B Require distinctive design features at unique sites such as mountain portals, the terminus of a public view and other important public spaces and social gathering places.	**Consistent.** The Town will review the location of the proposed structures, bulk/massing, use of building materials, colors, and landscaping to ensure consistency with the Town Development Code which strives to protect major view corridors and major landscape characteristics.

Table IV.B-2
Consistency with 2007 General Plan Applicable Aesthetics Policies

Policy	Consistency Analysis
C.3.E Ensure that landscaping, signage, public art, street enhancements and building design result in a more hospitable and attractive pedestrian environment. Require an even higher level of design quality and detail in commercial mixed use areas.	**Consistent.** See response to Policy C.2.D. and C.2.N.
C.3.F Underground utilities within the community.	**Consistent.** The Project is subject to design review by the Town Planning Department, other departments and divisions, and outside agencies. All utilities would be located underground and would be reviewed by the Town for consistency with Design Guidelines.
Natural Environment	
C.4.B To retain the forested character of the town, require use of native and compatible plant species in public and private developments and aggressive replanting with native trees.	**Consistent**. See response to Policy C.2.N.
C.4.C Retain overall image of a community in a forest by ensuring that native trees are protected wherever possible and remain an important component of the community.	**Consistent**. See response to Policy C.2.N.
C.4.D Retain the forested character of the town by requiring development to pursue aggressive replanting with native trees and other compatible species.	**Consistent**. See response to Policy C.2.N.
Night Sky, Light Pollution, and Glare	
C.5.A Require outdoor light fixtures to be shielded and down-directed so as to minimize glare and light trespass.	**Consistent**. The Project would include an Outdoor Lighting Plan to ensure compliance with the Town's Lighting Ordinance (Chapter 17.34, Municipal Code). Excessive illumination would be avoided and lighting would be designed and placed to minimize glare and reflection. The Project is subject to design review by the Town Planning Department, which would consider the adequacy of signage and markings for pedestrian safety.
C.5.C Improve pedestrian safety by eliminating glare for motorists through use of non-glare roadway lighting. A light fixture's source of illumination shall not be readily visible at a distance. Number of fixtures used shall be adequate to evenly illuminate for pedestrian safety.	**Consistent**. See response to Policy C.5.A.
LAND USE	
Livability	
L.1.B Require all development to meet community goals for highest quality of design, energy efficiency, open space preservation, and promotion of a livable, sustainable community. Development that does not fulfill these goals shall not be allowed.	**Consistent**. See response to Policy C.2.I. The Project has a variety of resort lodging supported by restaurants, resort, services, neighborhood conveniences, commercial, retail, and outdoor ancillary recreation designed as a traditional small-scale village. The Project has dispersed structures and a strong vertical emphasis with a 120-foot Hotel.

While the 2007 General Plan does not explicitly prohibit a 120 foot Hotel, the Town's Municipal Code does. Inconsistency with a policy may indicate a significant physical impact, but the inconsistency is not itself an impact. Although development of the Project Site has been previously contemplated, given the character of the Project site and the fact that the site has been undeveloped for that period of time, the Project would result in significant impacts to scenic vistas by altering the visual character of the site, which would be apparent to viewers looking toward the Sherwin Range from public areas near the Project site. Whether the Town decides to amend the zoning code and allow the Hotel to have increased height or not, the Project would create an impact for which there are no mitigation measures available and this impact would be ***significant and unavoidable***.

Impact AES-2 Public Views and Scenic Vistas

The following discussion provides a comparison of "before" views and "after" views associated with the Project. A total of 12 photo simulations depicting views after the Project is constructed are presented below. The locations from which the view photographs were taken and the direction of each view is indicted on Figure IV.B-2. The "before" views associated with each simulation are presented in Figures IV.B-3 through IV.B-8, and are described above. The "after" views were produced by simulating what the Project is expected to look like after construction is completed using computer modeling, photographs, and Project plans. For all viewpoints with the exception of View 6, the proposed building heights are illustrated with yellow lines. Because the View 6 vantage point is from a substantially higher elevation to the south of the Project site, building heights cannot be accurately portrayed on a two-dimensional graphic and, thus, are not illustrated.

Old Mammoth Road and Minaret Road Looking South (View 1)

View 1, Figure IV.B-9, located on Old Mammoth Road just east of its intersection with Minaret Road is shown under non-snow and snow conditions. The Resident's Club with a snack bar and swimming pool, and low-density stacked flats and townhouses constructed as part of the Project would be visible in the mid-foreground from this view. Other view features would remain unchanged, including views of the driving range (landscaped turf area to become part of the reconfigured 18-hole golf course), a grove of trees to the west, and rolling hills and mountains directly to the south. Although views of the Sherwin Range would not be obscured by the Project, the Project would result in substantial changes to views of the Project site and the alteration of views toward the Sherwin Range from the View 1 location. Therefore, the Project would result in significant changes to views from Old Mammoth Road and Minaret Road looking south and this impact would be ***significant.***

Old Mammoth Road and Sherwin Creek Road Looking South (View 2)

View 2, Figure IV.B-10, located on Old Mammoth Road just west of its intersection with Sherwin Creek Road is shown under non-snow and snow conditions. The Hotel and high- and low-density stacked flats and townhouses constructed as part of the Project would be visible in the mid-foreground from this view. Other view features would remain unchanged, including views of a mountain meadow with boulders,

scrub, and scattered pines. Although the characteristics of the Project site would be altered with development of the Project, views of rolling hills to the southeast and the Sherwin Range directly to the south would not be obscured by the Project. Therefore, although the Project site would be altered, the Project would not result in significant changes to views from Old Mammoth Road and Sherwin Creek Road looking south and this impact would be ***less than significant.***

Minaret Road Looking South (View 3)

Figure IV.B-11 shows View 3, located north of the Project site looking south from Minaret Road near its intersection with Chateau Road under non-snow and snow conditions. Development on the Project site would be partially obscured by existing trees. Some building roofs would be visible interspersed with the trees, but these buildings would only minimally obscure views of the bottom of rolling hills behind the site. The Project would not obscure views of the Sherwin Range and this impact would be ***less than significant.***

View 1: Old Mammoth Road & Minaret Road, Looking South with Project (Summer)

View 1: Old Mammoth Road & Minaret Road, Looking South with Project (Winter)

Source: Christopher A Joseph & Associates, Henry Lenny Design Studio 2007.

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Figure IV.B-9
View 1, Old Mammoth Road & Minaret Road with Project

Back of Figure IV.B-9

View 2: Old Mammoth Road & Sherwin Creek Road, Looking South with Project (Summer)

View 2: Old Mammoth Road & Sherwin Creek Road, Looking South with Project (Winter)

Source: Christopher A Joseph & Associates, Henry Lenny Design Studio 2007.

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Environmental Planning and Research

Figure IV.B-10
View 2, Old Mammoth Road & Sherwin Creek Road with Project

Back of Figure IV.B-10

View 3: Minaret Road, Looking South with Project (Summer)

View 3: Minaret Road, Looking South with Project (Winter)

Source: Christopher A Joseph & Associates, Henry Lenny Design Studio 2007.

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Environmental Planning and Research

Figure IV.B-11
View 3, Minaret Road with Project

Back of Figure IV.B-11

Sherwin Creek Road Looking West (View 4)

View 4, Figure IV.B-12, looking west from Sherwin Creek Road is shown under non-snow and snow conditions. Views of the Hotel, low-density housing, and medium-density housing would be seen in the mid-ground. Views in the distant foreground of scattered development would still be visible. Although views of rolling hills and the Sherwin Range would not be obscured by the Project, the Project would alter the visual characteristics of the Project site and contribute to the perception of more development in the foothills adjacent to the Sherwin Range, resulting in a ***significant*** impact.

U.S. Forest Service Lands to the West of Sherwin Creek Road (View 5)

Figure IV.B-13, View 5 located to the west of View 4 on U.S. Forest Service lands is shown under non-snow and snow conditions. Views of the Hotel, Golf Clubhouse, and low-density stacked flat constructed as part of the Project would be partially screened by trees, but still visible in the mid-foreground from this view. Development in the Town would still be visible in the distance. Far views of rolling tree-covered hills would still be visible and the far views of the mountains to the west would not be obscured. However, although views of rolling hills and the Sherwin Range would not be obscured by the Project, the Project would alter the visual characteristics of the Project site by developing an open meadow area with resort development, resulting in a ***significant*** impact.

Panorama Dome Trail Looking East (View 6)

View 6, Figure IV.B-14, looking east from a hiking trail on the Panorama Dome in the Sherwin Range is shown under non-snow and snow conditions. The Project would be visible to the northeast in the distance in the near meadow areas of the view. The Project would result in visual changes to the Project site by developing a meadow with resort uses. The Project would not obscure any views of mountains in the distance; however, changes to visual character from development of the meadow would be substantial and this impact would be ***significant.***

The Project would not obscure views of the Sherwin Range from Views 2 and 3. Views of the Sherwin Range from Views 1, 4, 5, and 6 would be slightly obscured. However, the Project would result in substantial changes to visual character on the Project site within the viewshed, resulting in impacts to views. No mitigation measures are available to fully mitigate such impacts. Therefore, impacts to views would be ***significant and unavoidable***.

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View 4: Sherwin Creek Road, Looking West with Project (Summer)

View 4: Sherwin Creek Road, Looking West with Project (Winter)

Source: Christopher A Joseph & Associates, Henry Lenny Design Studio 2007.

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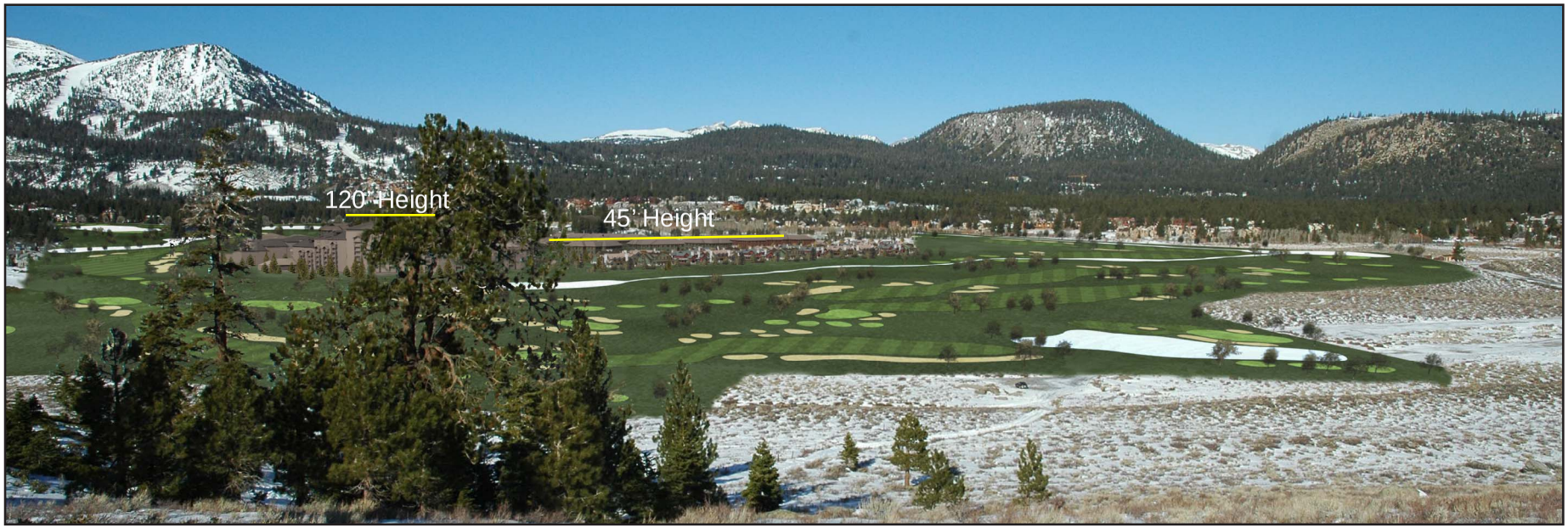
Figure IV.B-12
View 4, Sherwin Creek Road, Looking West with Project

Back of Figure IV.B-12

View 5: U.S. Forest Service Lands to the West of Sherwin Creek Road with Project (Summer)



View 5: U.S. Forest Service Lands to the West of Sherwin Creek Road with Project Project (Winter)

Source: Christopher A Joseph & Associates, Henry Lenny Design Studio 2007.

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Figure IV.B-13
View 5, U.S. Forest Service Lands to the West of Sherwin Creek Road with Project

Back of Figure IV.B-13

View 6: Panorama Dome Trail, Looking East with Project (Summer)

View 6: Panorama Dome Trail, Looking East with Project (Winter)

Source: Christopher A Joseph & Associates, Henry Lenny Design Studio 2007.

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Figure IV.B-14
View 6, Panorama Dome Trail with Project

Back of Figure IV.B-14

Impact AES-3 Scenic Resources within a State Scenic Highway

In the vicinity of the Town of Mammoth Lakes, State Highway 203 (Main Street) is an eligible State Scenic Highway (not officially designated) and U.S. Highway 395 is an officially designated State Scenic Highway.[1] The Project site is approximately 1.5 miles from Main Street and approximately 4 miles from U.S. Highway 395. Due to the topography of the area, the Project site is not visible from Main Street. Additionally, the Project site is too distant from U.S. Highway 395 and would not be visible from any vantage point along its route due to intervening topography. Therefore, impacts to scenic resources observable from a State Scenic Highway would be ***less than significant*** with the development of the Project.[2]

Impact AES-4 Visual Character and Design

Form, Mass, and Scale

The Project would organize the form and mass of a single building in relationship to the scale of neighboring buildings and in relationship to the size and use of adjacent open space. The Town would review all final proposed building designs to ensure that the Project would be responsive and expressive of its unique alpine setting. The Project will take into consideration neighboring building colors when using strong, deep trim colors on doors and structural details. The Project's main street would terminate at the Hotel, with resort amenities, including a public ice skating pond and a swimming pool. The Hotel's form, although tall, would be stepped-down at the ends to reduce apparent mass and to provide a pleasing form that allows for the maintenance of views to the areas beyond.

Residential units would range from two to three stories in height. Building mass would be varied to create variety in the character of the building elevations. A not-to-exceed 120-foot height is proposed for the Hotel. This proposed building height would exceed the height limit of 55 feet in the Town's zoning code and would constitute a substantial change. However, the Hotel would be located at the edge of the Project site and its building elevations would be stepped down or terraced, which would serve to reduce the perceived mass of the Hotel, as described previously under Impact AES-2.

The housing building forms would be set back and stepped, with traditional sloping roofs yielding to terraced forms softened by landscape. The relationship between buildings would be designed to allow openness to views, light, and air. Each building density type (Low, Medium, and High) would be appropriately scaled, massed, and laced with trails, landscaping, and water features between buildings. Medium and High density housing would be built over understructure parking.

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[1] *California Department of Transportation California Scenic Highway Mapping System, website: http:// http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm, June 12, 2006.*

[2] *Site reconnaissance and observation noted by Scott Johnson, Graphics Director, CAJA, October 17, 2007.*

The Project's massing, form, and scale would be designed to be complementary to the natural setting. The minimal surface parking, the setbacks, the relations between buildings, the landscaping, and the crafted, articulated forms of natural materials with sloping roofs would reinforce a pedestrian scaled complex with visually pleasing buildings of subtle massing separated for views, softened by landscaping and set in a place of natural surroundings. The views and surrounding natural features would dominate the development and contribute to defining the scale of the Project.

Materials

The Town would review all final proposed building designs to ensure that the Project would create interesting building façades through the use of a diverse mix of materials. The building materials would be appropriate to the large scale and climatic extremes of the mountain region. Long-term durability, performance, and quality would be considered to determine which materials and finishes are appropriate to the prevailing climatic conditions in Mammoth Lakes. Pre-cast concrete, poured-in-place concrete and architectural finished concrete would be appropriate in special conditions where a building is distinctly separate from others and where suitable for the design intent. Exposed structural concrete or non-architectural concrete block buildings would not be acceptable. "Split-faced" or other architecturally finished concrete block would be considered for retaining walls and exposed portions of a parking garage and/or foundation wall in locations where visibility is limited. Limited applications of plaster coat would be acceptable, in particular for use on upper levels. Horizontal lap siding, vertical board and batten, or shingle siding (wood or fiber cement) would be painted or stained. Wood siding, rather than fiber cement siding, would be encouraged. Fiber cement siding (such as "Hardiplank" or similar products) would be discouraged on lower portions of building elevations. In general, metal or plastic siding materials will not be acceptable. Columns would be timber, log, metal, or stone clad. If metal is used, it would be well detailed. All columns would have base and top details which would exhibit good connections to other materials. The use of stone and rock cladding at a structure's base would be encouraged.

Colors

The Project would use complementary building colors throughout the site to create an overall architectural unity while introducing other colors to express individuality and diversity within neighborhoods or building groupings. The Project would use a variety of colors drawn from the colors found in nature within the Mammoth Lakes region on buildings, window and door trims, eaves, window shutters, signage, and entrance areas to create vitality and would avoid repetition of similar colors that would create a monotone appearance. The Project will take into consideration neighboring building colors when using strong, deep trim colors on doors, windows, balcony railings, shutters, and structural details. Building colors would be presented on a materials and color board showing primary materials and colors for approval before use. Roof colors would be muted rather than bright. Untreated and shiny metal surfaces would be avoided. Where building walls step to change direction, the wall color may change to emphasize the different façades. Color changes along a building facade would occur at inside,

rather than outside corners. Where appropriate, wall colors may be vertically organized to express building modules or materials.

Structured or Understructure Parking

The Project would provide understructure parking facilities for the majority of the development. Surface parking for check in, tour buses, and delivery/service vehicles would also be provided. The Town would review all final parking structure designs to ensure that they would be consistent with the overall building designs. Parking structures would incorporate appropriate signage and lighting to enable convenient way finding and safety. All exit areas would be well lit. Placement of control gates would be coordinated with building and driveway design. The garage interiors would be well-lit with fixtures that create a general light rather than point source glare. Exterior parking structure lighting would be designed to minimize glare and visible light sources by requiring that light sources be shielded and the light directed downward onto the structure and surrounding grounds. The signage would be appropriately sized, logical, and clearly visible and would conform to the signage plan for the Project.

Landscape Design and Planting

The landscaping plans would reflect a natural "native" feel, utilizing various types of pines, spruce and aspen, natural ground cover, and minimal use of lawn area. Water elements such as ponds and interconnecting streams would meander throughout the Project site. The landscaping would complement the architecture in type and massing. Landscape site work would be consistent with traditional approaches for the region, and would address current needs, codes, regulations, and environmental considerations and would be designed to enhance the user experience, safety, and enjoyment. The use of native plants that are indigenous to the Mammoth Lakes region would be encouraged. Landscaping shall conform to the Town's adopted water-efficient landscape regulations.

Grading and Drainage

The Project would develop the grades and topographic forms needed to achieve necessary grades for siting buildings in relationship to utility extensions, roads, pedestrian areas, man-made or natural water features and channels, and golf course areas. Grading would be done to create natural-looking slopes that have diversity in gradient and profile where feasible. All grading operations would be carefully managed to blend into to adjacent non-graded areas and protect existing trees.

Utilities

The Project would minimize the visual impacts of aboveground utility structures and equipment including transformers, vents, condensers, fans, etc. The Project would minimize the visibility of exterior service and storage areas. The Project would locate equipment enclosures and storage containers in areas of low visibility, away from major public walks and streets and building entrances to the extent practical. Where possible, the Project would locate utility structures in landscape areas where shrub planting can screen

them. The Project would use landscape materials, berms, and tree planting to visually screen exterior service areas, ramps, docks, etc. Painting of utility enclosures in colors compatible with the surrounding landscape palette would be encouraged when permitted by utility companies. Where size of structure and location warrant, service areas and utility structures would be enclosed behind walls, fences, or screens. The enclosure material would be consistent to that of adjacent buildings in materials, detailing, and color.

Visual Character Summary

This analysis is based on conceptual designs for the Project. As detailed in the preceding discussion, the Project would be designed to complement the existing alpine architectural character of nearby development and elsewhere within the Town of Mammoth Lakes. The Town would review all final building designs to ensure that the Project would be responsive to, and expressive of, its unique alpine setting. However, the Project would represent a substantial change in the visual character of the Project site by constructing housing and resort uses on a formerly undeveloped meadow. This change in character would be significant. The Town Code already requires the Project to undergo design review which will review the location of buildings, bulk and massing, materials and colors with the goal of furthering general plan policies and reducing the aesthetic impacts of the Project. There are no mitigation measures available that would reduce this impact; therefore this impact is ***significant and unavoidable.***

Impact AES-5 Signage

The Project would provide signage that is designed to be clear, understandable and attractive to both the vehicular and pedestrian viewer. The signage would reflect the mountain retreat community character of the Project with regard to materials, form and use. Signage would inform and direct, but in a manner and style which is intended to create a memorable impression and show a connection to nature, architecture and the historic past. Signage would link together the entire resort, clubs, and residential components, and cultivate an inclusive relationship throughout the Project site. Compliance with Mitigation Measure AES-5 would ensure that impacts related to signage would be ***less than significant***.

Mitigation Measure AES-5

Prior to the issuance of building permits, all buildings containing three or more separate businesses shall prepare a Master Sign Plan, in accordance with the Mammoth Lakes Municipal Code Chapter 17.34 and 17.40.

Impact AES-6 Light and Glare

All site and building lighting would be installed in conformance with the Town's outdoor lighting ordinance.[3] Excessive illumination would be avoided and lighting would be designed and placed that minimizes glare and reflection and to maintain "dark skies."

The lighting needs at the Project site would vary according to the type and intensity of use. Varying illumination levels would be developed which address the particular needs of outdoor spaces and activities: safety, security, vehicular and pedestrian movement, retailing, signage, etc. Excessive illumination would be avoided and lighting would be designed and placed to minimize glare and reflection, and light fixtures would be required that shield the light source to direct light downward onto the structure and surrounding grounds to maintain "dark skies."

Although the Project would be required to implement and be consistent with all Town ordinances related to outdoor lighting, the introduction of light and glare on a formerly undeveloped meadow would create a new source of light or glare that would be noticeable and would expand the existing lit footprint of the Town. Project lighting would alter nighttime views from Views 1, 2, 4, 5, and 6. This would be a significant impact. Although compliance with Mitigation Measure AES-6 is required, such compliance would not reduce this impact to a less than significant level. Therefore, this impact would be ***significant and unavoidable.***

Mitigation Measure AES-6

Prior to occupancy, all lighting on the Project site shall comply with the applicable requirements of the Town of Mammoth Lakes Outdoor Lighting Ordinance, in accordance with Mammoth Lakes Municipal Code Chapter 17.34.

CUMULATIVE IMPACTS

Impact AES-7 Cumulative Impacts

There are 41 related projects in the vicinity of the Project (see Figure II-10). Related projects that are close enough to the Project site to have a direct cumulative visual quality impact in combination with the Project include Related Project Numbers 1, 13, 23, 33, 35 and 36 (see Table II-1). These related projects are located along Old Mammoth Road in the vicinity of the Project site. Other related projects are scattered throughout the Town and consist of development ranging from ten unit residential projects to larger resort projects. The Project site is located on the southern edge of the Town and is surrounded by existing development to the west and north. The Project would include development of the Golf Course

[3] *Town of Mammoth Lakes, Municipal Code, Chapter 17.34, Outdoor Lighting Code.*

expansion area adjacent to open space areas providing a transition from undeveloped areas to the east and south of the Project site to the Project development.

As described in this section, the Project, although consistent in character with surrounding development, would result in significant impacts to the visual character of the Project site and views of the Sherwin Range. Each of the related projects proposed for the Project vicinity would be required to conform to Town development regulations and be reviewed against Town design guidelines prior to final approval. However, development of the Project in association with these related projects would result in a gradual infill of existing development in this sector of the Town, which would result in changes in visual character in the area. Therefore, the Project combined with the related projects would result in a cumulative impact to views and the visual character of the Town. As a result, cumulative impacts with respect to scenic views and existing visual character would be considered significant and the Project's incremental contribution to cumulative impacts would be ***significant and unavoidable***.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Following implementation of the recommended mitigation measures, Project-specific and cumulative impacts with respect to scenic resources and existing visual character would be ***significant and unavoidable***.

IV. ENVIRONMENTAL IMPACT ANALYSIS
C. AIR QUALITY

INTRODUCTION

The Town of Mammoth Lakes (Town) is located within the Great Basin Unified Air Pollution Control District (GBUAPCD or District). Air pollutant emissions within the District are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at an identified location and are usually associated with manufacturing and industry. Examples are boilers or combustion equipment that produces electricity or generates heat. Area sources are widely distributed and produce many small emissions. Examples of area sources include residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and consumer products such as barbeque lighter fluid and hair spray. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, racecars, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds.

Both the Federal and State governments have established ambient air quality standards for outdoor concentrations of various pollutants in order to protect public health and welfare. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria that have been adopted for them. The national and State standards have been set at levels considered safe to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

The criteria air pollutants which are most relevant to current air quality planning and regulation in the District include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), sulfur dioxide (SO_2), and lead. In addition, toxic air contaminants and greenhouse gas (GHG) emissions are of concern in the Great Basin Valley Air Basin (GBVAB or Basin). Each of these is briefly described below.

- *Ozone (O_3)* is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_x)—both by products of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable.
- *Carbon Monoxide (CO)* is a colorless, odorless gas produced by the incomplete combustion of fuels. Carbon monoxide concentrations tend to be the highest during the winter morning, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines—unlike O_3—and motor vehicles operating

at slow speeds are the primary source of CO in the Basin, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

- *Respirable Particulate Matter (PM_{10})* and *Fine Particulate Matter ($PM_{2.5}$)* consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities.
- *Nitrogen dioxide (NO_2)* is a by product of fuel combustion. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), which reacts quickly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_x (nitrogen oxides). Nitrogen dioxide absorbs blue light and result is a brownish-red cast to the atmosphere and reduced visibility. Nitrogen dioxide also contributes to the formation of PM_{10}.
- *Sulfur dioxide (SO_2)* is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, and from chemical processes occurring at chemical plants and refineries.
- *Lead* occurs in the atmosphere as particulate matter. The combustion of leaded gasoline used to be the primary source of airborne lead in the Basin, although the use of leaded gasoline is no longer permitted for on-road motor vehicles. Today the primary sources of airborne lead pollution include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.
- *Toxic Air Contaminants (TAC)* refer to a diverse group of "non-criteria" air pollutants that can affect human health, but have not had ambient air quality standards established for them. This is not because they are fundamentally different from the pollutants discussed above, but because their effects tend to be local rather than regional. There are hundreds of toxic air contaminants and exposure to these pollutants can cause or contribute to cancer, birth defects, genetic damage, and other adverse health effects.
- *Greenhouse Gas (GHG) Emissions* refer to a group of emissions that are believed to affect global climate conditions. Simply put, the greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. Greenhouse gases such as carbon dioxide (CO_2), methane, and nitrous oxide keep the average surface temperature of the Earth close to a hospitable 60 degrees Fahrenheit. Without the greenhouse effect, the Earth would be a frozen globe with an average surface temperature of about 5 degrees Fahrenheit.

Health Effects of Air Pollutants

The health effects of the criteria pollutants (i.e., ozone, carbon monoxide, fine suspended particulate matter, nitrogen dioxide, sulfur dioxide, and lead) and toxic air contaminants are described below:[1]

Ozone (O_3)

Individuals exercising outdoors, children and people with preexisting lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible sub-groups for O_3 effects. Short-term exposures (lasting for a few hours) to O_3 at levels typically observed in California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple sports and live in high ozone communities.

Ozone exposure under exercising conditions is known to increase the severity of the above mentioned observed responses. Animal studies suggest that exposures to a combination of pollutants that include ozone may be more toxic than exposure to O_3 alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.

Carbon Monoxide (CO)

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of worsening oxygen supply to the heart.

Inhaled CO has no direct toxic effect on the lungs, but exerts its effect on tissues by interfering with oxygen transport by competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include patients with diseases involving heart and blood vessels, fetuses, and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes.

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[1] *The descriptions of the health effects of the criteria pollutants are taken from Appendix C (Health Effects of Ambient Air Pollutants) of SCAQMD's "Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning" document.*

Reduction in birth weight and impaired neurobehavioral development has been observed in animals chronically exposed to CO resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels. These include pre-term births and heart abnormalities. Additional research is needed to confirm these results.

Particulate Matter (PM_{10} and $PM_{2.5}$)

A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life-span, and an increased mortality from lung cancer.

Daily fluctuations in fine particulate matter concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter.

The elderly, people with pre-existing respiratory or cardiovascular disease and children appear to be more susceptible to the effects of PM_{10} and $PM_{2.5}$.

Nitrogen Dioxide (NO_2)

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposures to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups.

In animals, exposure to levels of NO_2 considerably higher than ambient concentrations results in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of ozone exposure increases when animals are exposed to a combination of O_3 and NO_2.

Sulfur Dioxide (SO_2)

A few minutes exposure to low levels of SO_2 can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in

breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2.

Animal studies suggest that despite SO_2 being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.

Sulfates (SO_4)

Most of the health effects associated with fine particles and SO_2 at ambient levels are also associated with SO_4. Thus, both mortality and morbidity effects have been observed with an increase in ambient SO_4 concentrations. However, efforts to separate the effects of SO_4 from the effects of other pollutants have generally not been successful.

Clinical studies of asthmatics exposed to sulfuric acid suggest that adolescent asthmatics are possibly a subgroup susceptible to acid aerosol exposure. Animal studies suggest that acidic particles such as sulfuric acid aerosol and ammonium bisulfate are more toxic than non-acidic particles like ammonium sulfate. Whether the effects are attributable to acidity or to particles remains unresolved.

Lead

Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure.

Lead poisoning can cause anemia, lethargy, seizures and death. It appears that there are no direct effects of lead on the respiratory system. Lead can be stored in the bone from early-age environmental exposure, and elevated blood lead levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of lead because of previous environmental lead exposure of their mothers.

Toxic Air Contaminants (TACs)

Toxic Air Contaminants (TACs) are a broad class of compounds known to cause or contribute to cancer or non-cancer health effects such as birth defects, genetic damage, and other adverse health effects. As discussed previously, effects from TACs may be both chronic and acute on human health. Acute health effects are attributable to sudden exposure to high quantities of air toxics. These effects include nausea, skin irritation, respiratory illness, and, in some cases, death. Chronic health effects result from low-dose long-term exposure from routine releases of air toxics. The effect of major concern for this type of exposure is cancer, which requires a period of 10-30 years after exposure to develop.[2]

TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., benzene near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average).[3] According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the federal Hazardous Air Pollutants programs. California has adopted a comprehensive diesel risk reduction program. The United States Environmental Protection Agency (U.S. EPA) has adopted low sulfur diesel fuel standards that will reduce diesel particulate matter substantially. These went into effect in June 2006.

Greenhouse Gas (GHG) Emissions

The issue of global climate change alleged to be caused by greenhouse gases (GHG) is currently one of the most important and widely debated scientific, economic, and political issues in the United States. Climate change is a shift in the "average weather" that a given region experiences. This is measured by changes in temperature, wind patterns, precipitation, and storms, including the potential for more extreme or more frequent severe weather conditions. While the effects of global climate change may occur on a global, regional, or local basis, the impacts are believed to result from changes in the global climate of the Earth as a whole (i.e., an increase in the concentration of certain gases in the atmosphere commonly referred to as "greenhouse gases"). Global climate can occur naturally, as in the case of an ice age.

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[2] *California Air Resources Board (CARB), Air Quality Analysis Guidance Handbook, Chapter 3 (Basic Air Quality Information), http://www.aqmd.gov/ceqa/handbook/CH3_rev.doc, accessed July 14, 2006.*

[3] *South Coast Air Quality Management District (SCAQMD), Air Toxics Control Plan, http://www.aqmd.gov/aqmp/docs/AirToxicsControlPlan.pdf, accessed July 14, 2006.*

Some believe and some data support the conclusion that substantial changes in the global climate have occurred in the past (particularly on a geologic time scale of thousands or millions of years). The issue of global climate change differs from the previous shifts in that the changes that are believed to be occurring today are believed by some to be occurring at a more rapid rate and magnitude. Gases that trap heat in the atmosphere are often called greenhouse gases. The Earth's surface temperature would be about 61° F colder than it is now if it were not for the natural heat trapping effect of greenhouse gases. The increased accumulation of these gases in the Earth's atmosphere over the last 200 years is considered the cause of the observed increase in the Earth's temperature (global warming). Greenhouse gases consist of water vapor, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Some greenhouse gases such as carbon dioxide are emitted to the atmosphere through natural processes and human activities. Other greenhouse gases (e.g., fluorinated gases) are created and emitted solely through human activities.

Scientists have shown that the concentration of these gases in the atmosphere can impact temperature by "trapping" heat within the Earth's atmosphere because these greenhouse gases absorb longwave radiation emitting from the Earth's surface; therefore, an increase in the concentration of greenhouse gases will result in a corresponding increase in the amount of radiation contained within the Earth's atmosphere. Oxygen and nitrogen, the primary components of the Earth's atmosphere, do not absorb longwave radiation.

Based on the potential increase in longwave radiation contained within the atmosphere (the so-called "greenhouse effect"), some believe that the accumulation of these gases in the Earth's atmosphere is the cause of the observed increase in the Earth's temperature (global warming) over recent decades.

Global Warming Potential (GWP)

Greenhouse gases have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the "cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas."[4] One teragram of carbon dioxide equivalent (Tg CO_2 Eq.) is essentially the emissions of the gas multiplied by the GWP. One teragram is equal to one million metric tons. The carbon dioxide equivalent is a good way to assess emissions because it gives weight to the GWP of the gas. A summary of the atmospheric lifetime and GWP of selected gases is summarized in Table IV.C-1. As shown in the table, GWP ranges from 1 to 23,900.

[4] *U.S. Environmental Protection Agency. 2006l.*

Table IV.C-1
Global Warming Potentials and Atmospheric Lifetimes

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)
Carbon Dioxide	50 - 200	1
Methane	12 ± 3	21
Nitrous Oxide	120	310
HFC-23	264	11,700
HFC-134a	14.6	1,300
HFC-152a	1.5	140
PFC: Tetrafluoromethane (CF_4)	50,000	6,500
PFC: Hexafluoroethane (C_2F_6)	10,000	9,200
Sulfur Hexafluoride (SF_6)	3,200	23,900

Source: U.S. Environmental Protection Agency, http://www.epa.gov/nonco2/econ-inv/table.html, updated Oct. 19, 2006.

Inventory

An analysis of data compiled by the United Nations Framework Convention on Climate Change (UNFCCC), indicates that in 2004, total worldwide GHG emissions were 20,135 teragram of carbon dioxide equivalent (Tg CO_2 Eq.), excluding emissions/removals from land use, land use change, and forestry.[5] In 2004, the United States (U.S.) contributed the most GHG emissions (35 percent of global emissions). In 2004, total GHG emissions in the U.S. were 7,074.4 Tg CO_2 Eq., which is an increase of 15.8 percent from 1990 emissions.[6] In 2005, total U.S. GHG emissions were 7,260.4 Tg CO_2 Eq.[7] Overall, total U.S. emissions have risen by 16.3 percent from 1990 to 2005, while the U.S. gross domestic product has increased by 55 percent over the same period.[8] Emissions rose from 2004 to 2005, increasing by 0.8 percent (56.7 Tg CO_2 Eq.). The main causes of the increase: (1) strong economic growth in 2005, leading to increased demand for electricity and (2) an increase in the demand for electricity due to warmer summer conditions.[9] However, a decrease in demand for fuels due to warmer winter conditions and higher fuel prices moderated the increase in emissions.[10]

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[5] *United Nations Framework Convention on Climate Change (UNFCCC), Greenhouse Gas Emissions Data, Predefined Queries, Annex I Parties - GHG total without LULUCF (land use, land-use change, and forestry), http://unfccc.int/ghg_emissions_data/predefined queries/items/3841.php, 2006.*

[6] *U.S. Environmental Protection Agency (EPA), Office of Atmospheric Programs, April 2006. The U.S. Inventory of Greenhouse Gas Emissions and Sinks: Fast Facts. http://epa.gov/climatechange/emissions/downloads06/06FastFacts.*

[7] *U.S. Environmental Protection Agency (EPA), Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2005, Executive Summary, April 15, 2007, USEPA #430-R-07-002. http://www.epa.gov/climatechange/emissions/downloads06/07CR.pdf, ES-4.*

[8] *Ibid.*

[9] *Ibid.*

[10] *Ibid.*

California is a substantial contributor of global greenhouse gases as it is the second largest contributor in the U.S. and the twelfth to sixteenth largest in the world.[11] During 1990 to 2003, California's gross state product grew 83 percent while GHG emissions grew 12 percent. While California has a high amount of GHG emissions, it has low emissions per capita. In 2004, California produced 492 Tg CO_2 Eq.[12], which is approximately seven percent of U.S. emissions. The major source of GHG in California is transportation, contributing 41 percent of the state's total GHG emissions.[13] Electricity generation is the second largest generator, contributing 22 percent of the state's GHG emissions.

Emissions from fuel use in the commercial and residential sectors in California decreased 9.7 percent over the 1990 to 2004 period.[14] According to the California Energy Commission (CEC), the decrease in greenhouse gases demonstrates the efficacy of energy conservation in buildings (Title 24 requirements) and appliances. The new 2005 Title 24 Standards will further reduce greenhouse gas emissions. The decrease in greenhouse gases attributed to these sources is even more substantial when the population increase in California is considered.

Currently, there is no known GHG emission data for the Great Basin Unified Air Pollution Control District (GBUAPCD or District) or for the Town.

Health Effects

The potential health effects from global climate change may be from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems. Heat related problems include heat rash and heat stroke. In addition, climate sensitive diseases may increase, such as those spread by mosquitoes and other disease carrying insects. Those diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and hurricanes can displace people and agriculture, which would have negative human health consequences including the spreading of disease and death. Global climate change may also contribute to air quality problems from increased frequency of smog and particulate air pollution.[15]

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[11] *California Energy Commission (CEC), December 2006, Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004 Staff Final Report, CEC-600-2006-013-SF., http://www.energy.ca.gov/2006publications/CEC-600-2006-013/CEC-600-2006-013-SF.PDF.*

[12] *Ibid.*

[13] *Ibid.*

[14] *Ibid.*

[15] *Association of Environmental Professionals, Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents (Final), June 29, 2007.*

Water Vapor

Water vapor (H_2O) is the most abundant, important, and variable greenhouse gas in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization.[16] The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a greenhouse gas, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there are also dynamics that put the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the Earth's surface and heat it up).

There are no health effects from water vapor. When some pollutants come in contact with water vapor, they can dissolve and then the water vapor can be a transport mechanism to enter the human body. The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.

Carbon Dioxide

Carbon dioxide (CO_2) is an odorless, colorless natural greenhouse gas. Outdoor levels of carbon dioxide are not high enough to result in negative health effects. Current concentrations of carbon dioxide in the ambient air are about 370 parts per million (ppm). The National Institute for Occupational Safety and Health (NIOSH) reference exposure level is 5,000 ppm, averaged over 10 hours in a 40-hour workweek. The short-term reference exposure level is 30,000 ppm, averaged over 15 minutes. At those levels, potential health problems are as follows: headache, dizziness, restlessness, paresthesia; dyspnea (breathing difficulty); sweating, malaise (vague feeling of discomfort); increased heart rate, cardiac output, blood pressure; coma; asphyxia; and/or convulsions.[17]

Carbon dioxide is emitted from natural and anthropocentric (human) sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus;

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[16] *U.S. Environmental Protection Agency (EPA) 2006b.*

[17] *National Institute for Occupational Safety and Health, 2005.*

evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. In 1999, the concentration of carbon dioxide in the atmosphere was 367 ppm, which is an increase from the concentration during the Industrial Era (1750) of 280 ± 10 ppm.[18] The concentration of carbon dioxide in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources.[19] Some predict that this will result in an average global temperature rise of at least 2° Celsius.[20] Sinks are mechanisms by which a gas or aerosol is taken out of the atmosphere. Carbon dioxide is removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks.

Methane (CH_4)

Methane (CH_4) is an extremely effective absorber of radiation, though its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is brief (10-12 years), compared to other greenhouse gases. Methane is not toxic. The immediate health hazard is that it may cause burns if it ignites. It is highly flammable and may form explosive mixtures with air. Methane is violently reactive with oxidizers, halogens, and some halogen-containing compounds. Methane is also an asphyxiant and may displace oxygen in an enclosed space.[21]

Methane has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane.[22] Other anthropocentric sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide (N_2O)

Nitrous oxide (N_2O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is harmless. In some cases, heavy and extended use can cause Olney's Lesions (brain damage). Concentrations of nitrous oxide also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load.[23] It is used as an aerosol spray propellant, i.e., in whipped cream

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[18] *Intergovernmental Panel on Climate Change (IPCC), 2001, Chapter 3.*
[19] *Ibid.*
[20] *Ibid.*
[21] *Occupational Safety and Health Administration (OSHA), 2003.*
[22] *U.S. Environmental Protection Agency, 2006b.*
[23] *Ibid.*

bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. Nitrous oxide can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction.

Chlorofluorocarbons (CFCs)

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs are no longer being used; therefore, it is not likely that health effects would be experienced. Nonetheless, in confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.[24]

CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years (NOAA 2005).

Hydrofluorocarbons (HFCs)

Hydrofluorocarbons (HFCs) are synthetic man-made chemicals that are used as a substitute for CFCs. Of all the greenhouse gases, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2).[25] Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 HFC-134a are now about 10 parts per trillion (ppt) each.[26] Concentrations of HFC-152a are about 1 ppt.

Most HFCs do not have health effects associated with them. For example, 1, 1- difluoroethane (HCFC-152A), does not have any adverse health effects.[27] However, HFC-134a has a chronic inhalation exposure of 80 milligrams per cubic meter (mg/m^3); the critical effect is Leydig cell hyperplasia.[28] HFCs are man-made for applications such as automobile air conditioners and refrigerants.

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[24] *National Institute for Occupational Safety and Health, 1989.*
[25] *U.S. Environmental Protection Agency, 2006j.*
[26] *Ibid.*
[27] *U.S. Environmental Protection Agency, 1994.*
[28] *U.S. Environmental Protection Agency, 1995.*

Perfluorocarbons

Perfluorocarbons (PFCs) have stable molecular structures and do not break down though the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). Measurements in 2000 estimate global concentrations of CF_4 in the stratosphere are over 70 parts per trillion (ppt).[29]

High concentrations of CF4 can cause confusion, dizziness, or headache and may cause effects on cardiovascular system, resulting in cardiac disorders.[30] The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur Hexafluoride(SF_6)

Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated, 23,900. Concentrations in the 1990s were about 4 ppt.[31] In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Aerosols

Aerosols are particles emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Cloud formation can also be affected by aerosols. The health effect of aerosols is similar to particulate matter, discussed above. Sulfate aerosols are emitted when fuel with sulfur in it is burned. Black carbon (or soot) is emitted during bio mass burning incomplete combustion of fossil fuels. Particulate matter regulation has been lowering aerosol concentrations in the United States; however, global concentrations are likely increasing greenhouse gas emissions.

If global warming occurs, ambient air quality is likely to worsen. High temperatures, strong sunlight, and a stable air mass are ideal for formation of ground-level ozone. This is damaging to plants and humans.

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[29] *U.S. Environmental Protection Agency, 2006j. (EPA), High Global Warming Potential Gases. Science. http://www.epa.gov/highgwp/scientific.html, CAJA staff accessed August 20, 2007.*

[30] *National Institute for Occupational Safety and Health, 1997.*

[31] *U.S. Environmental Protection Agency, 2006j (EPA), High Global Warming Potential Gases. Science. http://www.epa.gov/highgwp/scientific.html, CAJA staff accessed August 20, 2007.*

In addition, rainfall patterns could change; resulting in more frequent droughts and flashfloods, and the snow pack in the Sierra Nevada, which provides much of California's water supply, could be reduced.

Regulatory Setting

Air quality within the Basin is addressed through the efforts of various federal, State, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for regulating and improving the air quality within the Basin are discussed below.

Federal

The United States Environmental Protection Agency (U.S. EPA) is responsible for setting and enforcing the federal ambient air quality standards for atmospheric pollutants. It regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The U.S. EPA also has jurisdiction over emissions sources outside state waters (outer continental shelf), and establishes various emissions standards for vehicles sold in states other than California.

As part of its enforcement responsibilities, the U.S. EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP.

State

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and State air pollution control programs within California. In this capacity, the CARB conducts research, sets California Ambient Air Quality Standards, compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. The CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hair spray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

In August, 2006, the California Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. This bill requires the CARB to adopt regulations to require the reporting and verification of statewide greenhouse gas emissions and to monitor and enforce compliance with that program. As part of this effort, the CARB will adopt a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions levels in 1990, to be achieved by 2020. The CARB will adopt rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions. These are expected to include market-based compliance mechanisms. The statute would

further require the CARB to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism that it adopts. The following timeline for implementation of AB 32 was published by the CARB (September 25, 2006):

By July 1, 2007	The CARB forms Environmental Justice and Economic and Technology Advancement advisory committees.
By July 1, 2007	CARB adopts list of discrete early action measures that can be adopted and implemented before January 1, 2010.
By January 1, 2008	CARB adopts regulations for mandatory greenhouse gas emissions reporting. CARB defines 1990 baseline for California (including emissions from imported power) and adopts that as the 2020 statewide cap.
By January 1, 2009	CARB adopts plan indicating how emission reductions will be achieved from significant sources of greenhouse gases via regulations, market mechanisms and other actions.
During 2009	CARB staff drafts rule language to implement its plan and holds a series of public workshops on each measure (including market mechanisms).
By January 1, 2010	Early action measures take effect.
During 2010	CARB conducts series of rulemakings, after workshops and public hearings, to adopt greenhouse gas regulations including rules governing market mechanisms.
By January 1, 2011	CARB completes major rulemakings for reducing greenhouse gases including market mechanisms. CARB may revise the rules and adopt new ones after 1/1/2011 in furtherance of the 2020 cap.
By January 1, 2012	Greenhouse gas rules and market mechanisms adopted by CARB take effect and are legally enforceable.
December 31, 2020	Deadline for achieving 2020 greenhouse gas emissions cap.

In October 2006, the Governor issued an Executive Order in which he designated the California Environmental Protection Agency Secretary with the primary responsibility for implementing AB 32 (rather than providing the CARB with unfettered discretion as the law required). In late December, the Governor announced the members of a blue-ribbon Market Advisory Committee board to devise approaches to develop a market for carbon trading. More developments are likely as the Governor and the Legislature determine who has primary responsibility for implementation and the relationship between regulations and market-based mechanisms. Because the intent of AB 32 is to limit 2020 emissions to the

equivalent of 1990 levels, and the present year (2007) is near the midpoint of this timeframe, it is expected that the regulations would affect many existing sources of greenhouse and not just new general development projects.

Regional

The Great Basin Unified Air Pollution Control District (GBUAPCD) is the agency principally responsible for comprehensive air pollution control in the Basin. To that end, the GBUAPCD, a regional agency, works directly with county transportation commissions, and local governments, and cooperates actively with all State and federal government agencies. The GBUAPCD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and provides regulatory enforcement through such measures as educational programs or fines, when necessary. Although the GBUAPCD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with plans and new development projects within the Basin.

National and State Ambient Air Quality Standards

As required by the Federal CAA, the National Ambient Air Quality Standards (NAAQS) have been established for six major air pollutants: carbon monoxide (CO), nitrogen oxides (NO_x), ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), sulfur oxides (SO_2), and lead. The California Ambient Air Quality Standards (CAAQS) apply to these same six criteria. The California CAA standards are more stringent than the Federal standards and, in the case of PM_{10} and SO_2, far more stringent. Federal and State standards are summarized in Table IV.C-2. Federal and State standards for these pollutants establish upper limits that protect all segments of the population, including those most susceptible to the pollutants' adverse effects (e.g., children, the elderly, people weak from illness or disease, or persons doing heavy work or exercise). The U.S. EPA develops and is responsible for updating the National Ambient Air Quality Standards, and the CARB is responsible for establishing the California Ambient Air Quality Standards.

Table IV.C-2
Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standard[a]	Federal Standard[b]
Ozone (O_3)	1-hour 8-hour	0.09 ppm —	0.12 ppm 0.08 ppm
Carbon Monoxide (CO)	1-hour 8-hour	20.00 ppm 9.00 ppm	35.00 ppm 9.00 ppm
Nitrogen Dioxide (NO_2)	1-hour Annual Average	0.25 ppm —	— 0.053 ppm
Sulfur Dioxide (SO_2)	1-hour 3-hour 24-hour Annual Average	0.25 ppm — 0.04 ppm —	— 0.5 ppm 0.14 ppm 0.03 ppm
Particulate Matter (PM_{10})	24-hour Annual Geometric Mean	50 µg/m^3 20 µg/m^3	150 µg/m^3 —

Table IV.C-2
Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standard[a]	Federal Standard[b]
	Annual Arithmetic Mean	—	50 µg/m^3
Fine Particulate Matter ($PM_{2.5}$)	24-hour Annual Arithmetic Mean	— 12µg/m^3	65 µg/m^3 15 µg/m^3
Lead (Pb)	30-day Average Calendar Quarter	1.5 µg/m^3 —	— 1.5 µg/m^3

Source: Summarized by CAJA from *BAAQMD CEQA Guidelines*, 1996, revised 1999.
Notes:
ppm = parts per million by volume
µg/m^3 = micrograms per cubic meter
— = no standard exists for this category
a. California standards for ozone, CO, NO_2, SO_2, and PM_{10} are values that are not to be exceeded.
b. Federal standards other than for ozone, particulates, and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the three-year average of the fourth highest daily concentrations is 0.08 ppm or less. The 24-hour PM_{10} standard is attained when the three-year average of the 99th percentile of the monitored concentrations is less than 150 µg/m^3. The 24-hour $PM_{2.5}$ standard is attained when the three-year average of 98th percentile is less than 65 µg/m^3.

ENVIRONMENTAL SETTING

Climate

The Project is located in Mono County. The climate of Mono County is dry with clear skies, excellent visibility, hot summers, and wide fluctuations in daily temperatures. The average minimum temperature is in the upper 20s (degrees Fahrenheit), while the average maximum temperature is in the mid- to high 50s. Most of the precipitation in this area, approximately 70 percent, occurs between November and February. Spring is the windiest season, with fast-moving northerly weather fronts. During the day, southerly winds result from the strong solar heating of the mountain slopes, causing upslope circulation. Summer winds are northerly at night as a result of cool air draining off the mountainsides. The mean annual wind speed in Mammoth Lakes is less than 11 miles per hour (mph). Mean annual wind speeds just outside of Mammoth Lakes at elevations of 8,900 ft. and 7,800 ft. above sea level are 21.7 and 11.5 mph, respectively.

Air Quality Monitoring Data

Air quality in Mammoth Lakes is monitored by the GBUAPCD located in Bishop, California. This Basin consists of Inyo, Mono, and Alpine Counties. Spot monitoring conducted by CARB for this area in 1972 identified particulates as the most probable air quality problem for the Basin. As a result, particulate monitoring stations were set up to monitor PM_{10} in the Basin. Currently, there are 12 monitoring sites in the GBVAB. Data reported for the years 2003 to 2005 are summarized in Table IV.C-3.

Table IV.C-3
PM_{10} and $PM_{2.5}$ Concentrations in the Mammoth Lakes Region

	24-Hour Maximum Concentration		Annual Average Concentration		Days Above National/State Standard	
	$PM_{2.5}$	PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$	PM_{10}
Regulatory Standards						
California Standard	N/A	50	12	20		
National Standard	65	150	15	50		
Monitoring Data						
2003: Gateway Home Center	34	74	N/A	N/A	0	0/1
2004: Gateway Home Center	27	86	N/A	24.1	0	0/3
2005: Gateway Home Center	27	85	N/A	N/A	0	0/5

Source: CARB, 2006.
All concentrations in $\mu g/m^3$ = micrograms per cubic meter
N/A = there was insufficient (or no) data available to determine the value

Table IV.C-4 presents CO and ozone monitoring data from the Mammoth Lakes Gateway Home Center monitoring station. Table IV.C-4 indicates that from 2000 to 2004, the Gateway Home (Rite Aid) Center monitoring station did not report any violations of the California or National Ambient Air Quality Standards for CO.

The maximum one hour concentration recorded at the Mammoth Lakes – Gateway Home Center station for O_3 was reported as 0.1 ppm. The Gateway Home (Rite Aid) Center monitoring station did report four days in exceedance of the California standard for ozone in 2001. The maximum eight-hour CO concentration measured at the Mammoth Lakes monitoring station was 0.083 ppm in 2003 and 2004. Exceedances of the ozone standard have occurred predominantly at night. In addition, the 2001 CARB transport review found that the San Joaquin Valley was the major contributor to the Mammoth Lakes ozone standard exceedances.[32]

[32] *Town of Mammoth Lakes, General Plan Update EIR, October 2005, p. 4-23.*

Table IV.C-4
Ambient Air Quality Ozone Standards and Monitoring Data Near the Project Area

	Ozone		CO	
	1-hour (ppm)	**8-hour (ppm)**	**1-hour (ppm)**	**8-hour (ppm)**
Regulatory Standards				
California Ambient Air Quality Standard	0.09	N/A	20.0	9.0
National Ambient Air Quality Standard	0.12	0.08	35.0	9.0
Monitoring Data				
2000: Gateway Home Center	-	-	4.2	2.5
2001: Gateway Home Center	0.100	-	15.4	2.5
2002: Gateway Home Center	0.071	-	3.8	1.8
2003: Gateway Home Center	0.088	0.083	-	-
2004: Gateway Home Center	0.093	0.083	-	-

Source: CARB (http://www.arb.ca.gov/adam/welcome/html)
CARB Almanac 2005 – Appendix B
Notes: ppm = parts per million
- = not available or not applicable

Attainment Status

Effective January 23, 2005, the Mono County portion of the Great Basin Valley Air Basin (GBVAB or Basin) has a nonattainment designation for O_3 (State standard only). All of the GBVAB is designated in nonattainment of the federal PM_{10} standard. The Mammoth Lakes area and Mono County are considered in attainment of all other Federal and State standards. Therefore, discussion of impacts for this Project will focus on those pollutants which are designated as non-attainment (O_3 and PM_{10}). Although Mono County is categorized as nonattainment of the State O_3 standard, there is no ozone implementation plan for attaining the ozone standard in Mono County, nor is one required as outlined in the 2001 CARB Ozone transport review. Instead, the document states "Transport from the central portion of the (San Joaquin) Valley is responsible for ozone violations in Mammoth Lakes."[33]

A Draft Air Quality Management Plan (AQMP) for the Town was released on January 19, 1990. The Plan identified PM_{10} sources and mitigation that could be instituted to attain the National Ambient Air Quality Standards. The Plan, prepared by GBAPCD, is required under the CAA and will become part of the State Implementation Plan to attain Federal standards. The Plan identifies exceedances of the PM_{10} standard that occur predominantly in the winter due to increased emissions from wood stoves, fire places, and traffic related road dust and cinders. This change is also fueled largely by the influx of visitors to the Mammoth Lakes area during ski season. The combination of periods of meteorological stagnation and peak periods at the ski resorts result in violations of PM_{10} standards. The Plan includes a control strategy to satisfy the Federal CAA requirement by demonstrating how the Mammoth Lakes area will meet and maintain the National Ambient Air Quality standards for PM_{10}.

[33] *Town of Mammoth Lakes, General Plan Update EIR, October 2005, p. 4-23.*

Sensitive Receptors

Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be sensitive receptors to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Residential uses are considered sensitive because people in residential areas are often at home for extended periods of time, so they could be exposed to pollutants for extended periods. Recreational areas are considered moderately sensitive to poor air quality because vigorous exercise associated with recreation places a high demand on the human respiratory function. The nearest sensitive receptors to the Project are residential uses located adjacent to the Project site. In the future, there will also be sensitive residential uses located on adjacent portions of the Project site, since portions of the site are already built and may be occupied while adjacent portions of the site are undergoing construction**.**

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the *CEQA Guidelines*, the proposed project would have a significant environmental impact on air quality if it would:

(a) Conflict with or obstruct implementation of the applicable air quality plan;

(b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

(c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

(d) Expose sensitive receptors to substantial pollutant concentrations; or

(e) Create objectionable odors affecting a substantial number of people.

Global Climate Change

There are currently no adopted thresholds or guidance to assess the significance of this impact. Global climate change is an international phenomenon; the regulatory background and scientific data are changing rapidly.

Nonetheless, the Californian Environmental Protection Agency Climate Action Team developed a report that "proposes a path to achieve the Governor's targets that will build on voluntary actions of California business, local government and community actions, and State incentive and regulatory programs" (CAT 2006). The report indicates that the strategies will reduce California's emissions to the levels proposed in

Executive Order S-3-05. If the project is not consistent with those strategies that the lead agency deems are feasible, then a project could potentially be deemed to have a significant impact with regards to global climate change.

Project Impacts and Mitigation Measures

Impact AQ-1 Construction Impacts

Foreseeable construction activities for the Project would include site preparation, grading, placement of utilities and other infrastructure, placement of foundations for structures, removal of existing structures, and fabrication of structures across the entire approximately 237-acre Project area. Construction activities typically require the use of heavy trucks, excavating and grading equipment, concrete breakers, concrete mixers, and other mobile and stationary construction equipment. Emissions during grading and construction would be caused by material handling, traffic on unpaved or unimproved surfaces, use of paving materials and architectural coatings, exhaust from construction worker vehicle trips, and exhaust from diesel-powered construction equipment.

Heavy construction activity on dry soil exposed during construction phases through 2017 could cause emissions of dust (usually monitored as PM_{10}). Reactive Organic Gases (ROGs,) nitrogen oxides (NO_x), carbon monoxide (CO), and additional particulate matter emissions also would be created from the combustion of diesel fuel by heavy equipment and construction worker vehicles. Throughout the construction phases, construction-related emissions would vary day-to-day depending on the specific construction phase. Construction-related activities associated with the Project would result in dust and equipment exhaust emissions that could, at times, contribute to nuisances to adjacent residential uses. In addition, the Project would be developed in separate phases, so there may be portions of the site that are built and occupied by residents while adjacent portions of the site are undergoing construction.

Construction projects using typical grading and construction equipment, such as dump trucks, scrapers, bulldozers, compactors, front-end loaders, fork lifts, and cranes which temporarily emit precursors of ozone (e.g., ROGs or NO_x), are already included in the emission inventories of State- and Federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone ambient air quality standards**.** Mono County is classified as attainment for all California Ambient Air Quality Standards (CAAQS), except ozone (O_3) and respirable particulate matter (PM_{10}), and all National Ambient Air Quality Standards (NAAQS) except PM_{10}. However, there is no O_3 implementation plan for attainment in Mono County, nor is one required as outlined in the 2001 CARB Ozone Transport Review.[34] The primary source of O_3 in the Town is from precursor pollutants -- NO_x and Volatile Organic Compounds (VOCs) originating from the San Joaquin Valley. Weather conditions in the San Joaquin Valley are ideal for the production of O_3. As stated earlier, air movements and prevailing winds

[34] *California Air Resources Board, 2001, page 45.*

carry the O_3 into Mono County and subsequently, Mammoth Lakes. Under California State law, the CARB determines the contribution of transported pollution as overwhelming, significant, inconsequential, or some combination of the three. The CARB Ozone Transport Review states that; "Transport from the central portion of the (San Joaquin) Valley is responsible for ozone violations in Mammoth Lakes . . ." and that the resulting impacts on the Town's air quality were classified as "overwhelming."

The maximum 1-hour O_3 concentration recorded at the Mammoth Lakes Station during the 2000 to 2005 period was 0.1 ppm, which was recorded in 2001. During the reported period, the California standard of 0.09 ppm was exceeded 4 times in 2001; the Federal standard of 0.12 ppm was not exceeded during this time. The maximum 8-hour O_3 concentration was 0.09 ppm, which was recorded in 2001. During the same period, the Federal standard of 0.08 ppm was exceeded two times in 2001. Prior to the above exceedances, the Mammoth Lakes Gateway monitoring station had not recorded an exceedance since 1995.

All of California is in non-attainment for PM_{10} under both state and federal standards. The maximum reported PM_{10} concentration at the Mammoth Lakes – Gateway Home Center monitoring station was 134 micrograms per cubic meter (ug/m^3) recorded in 2001. Between 2000 and 2005 the CAAQS for PM_{10} was exceeded two to five times per year. Therefore, this analysis is primarily focused on the two common pollutants of O_3 and PM_{10}.

The Project has been organized so that it could be developed in several phases, with the golf course expansion and Hotel construction occurring in the first phases and various residential components being progressively constructed at a pace dictated by market conditions. Each phase would operate successfully as a complete entity throughout the entire development. All staging would occur within the Project boundaries. Most construction phases would last approximately 18 to 24 months but some may be as long as 24 to 30 months. Some phases may be under construction simultaneously. Construction activities are proposed to be complete in 2017.

The analysis of daily construction emissions has been prepared utilizing the URBEMIS 2002 computer model. Data sheets for the URBEMIS modeling are provided in Appendix C of this Draft EIR. Due to the construction time frame and the normal day-to-day variability in construction activities, it is difficult to precisely quantify the daily emissions associated with each phase of the proposed construction activities. Nonetheless, Table IV.C-5 identifies daily emissions that are estimated to occur on peak construction days.

Table IV.C-5
Estimated Daily Construction Emissions

Emissions Source	Emissions in Pounds per Day				
	ROC	NO_x	CO	SO_x	PM_{10}
Phase I - Site Grading and Excavation					
Fugitive Dust	-	-	-	-	53.0
Off-Road Diesel Equipment	69.90	438.94	586.99	-	17.02
On-Road Diesel Equipment	1.09	18.89	4.03	0.04	0.55
Worker Trips	0.29	0.40	6.05	0.00	0.03
Total Emissions	***71.28***	***458.23***	***597.07***	***0.04***	***70.60***
Phase I - Building Construction Phase					
Building Construction Off-Road Diesel Equipment	25.34	161.74	209.62	-	6.13
Building Construction Worker Trips	0.64	0.31	7.34	0.00	0.16
Architectural Coatings Off-Gas	288.15	-	-	-	-
Architectural Coatings Worker Trips	0.64	0.31	7.34	0.00	0.16
Asphalt Off-Gas	0.49	-	-	-	-
Asphalt Off-Road Diesel Equipment	4.00	23.19	33.99	-	0.64
Asphalt On-Road Diesel Equipment	0.07	1.20	0.27	0.00	0.03
Asphalt Worker Trips	0.02	0.01	0.20	0.00	0.00
Total Emissions	***319.34***	***186.75***	***258.76***	***0.00***	***7.13***
Phase II - Site Grading and Excavation					
Fugitive Dust	-	-	-	-	39.00
Off-Road Diesel Equipment	69.71	419.86	590.14	-	14.11
On-Road Diesel Equipment	1.48	24.30	5.47	0.07	0.76
Worker Trips	0.24	0.32	5.06	0.00	0.03
Total Emissions	***71.43***	***444.48***	***600.67***	***0.07***	***53.90***
Phase II - Building Construction Phase					
Building Construction Off-Road Diesel Equipment	25.34	161..74	209.62	-	6.13
Building Construction Worker Trips	0.38	0.19	4.45	0.00	0.10
Architectural Coatings Off-Gas	65.37	-	-	-	-
Architectural Coatings Worker Trips	0.38	0.19	4.45	0.00	0.10
Asphalt Off-Gas	0.35	-	-	-	-
Asphalt Off-Road Diesel Equipment	4.00	23.19	33.99	-	0.64
Asphalt On-Road Diesel Equipment	0.05	0.85	0.19	0.00	0.02
Asphalt Worker Trips	0.02	0.01	0.20	0.00	0.00
Total Emissions	***95.89***	***186.17***	***252.89***	***0.00***	***7.00***

Table IV.C-5
Estimated Daily Construction Emissions

Emissions Source	Emissions in Pounds per Day				
	ROC	NO_x	CO	SO_x	PM_{10}
Phase III - Site Grading and Excavation					
Fugitive Dust	-	-	-	-	56.00
Off-Road Diesel Equipment	69.71	419.86	590.14	-	14.11
On-Road Diesel Equipment	1.63	26.80	6.04	0.07	0.84
Worker Trips	0.24	0.32	5.06	0.00	0.03
Total Emissions	***71.58***	***446.98***	***601.24***	***0.07***	***70.98***
Phase III - Building Construction Phase					
Building Construction Off-Road Diesel Equipment	25.34	161.74	209.62	-	6.13
Building Construction Worker Trips	0.55	0.26	6.33	0.00	0.14
Architectural Coatings Off-Gas	255.71	-	-	-	-
Architectural Coatings Worker Trips	0.55	0.26	6.33	0.00	0.14
Asphalt Off-Gas	0.41	-	-	-	-
Asphalt Off-Road Diesel Equipment	4.00	23.19	33.99	-	0.64
Asphalt On-Road Diesel Equipment	0.06	1.02	0.23	0.00	0.03
Asphalt Worker Trips	0.02	0.01	0.20	0.00	0.00
Total Emissions	***286.64***	***186.48***	***256.70***	***0.00***	***7.09***
Phase IV - Site Grading and Excavation					
Fugitive Dust	-	-	-	-	39.00
Off-Road Diesel Equipment	69.71	419.86	590.14	-	14.11
On-Road Diesel Equipment	0.96	12.53	3.83	0.07	0.53
Worker Trips	0.15	0.20	3.30	0.00	0.03
Total Emissions	***70.82***	***432.59***	***597.27***	***0.07***	***0.03***
Phase IV - Building Construction Phase					
Building Construction Off-Road Diesel Equipment	25.34	161.74	209.62	-	6.13
Building Construction Worker Trips	0.23	0.11	2.89	0.00	0.10
Architectural Coatings Off-Gas	64.59	-	-	-	-
Architectural Coatings Worker Trips	0.23	0.11	2.89	0.00	0.10
Asphalt Off-Gas	0.34	-	-	-	-
Asphalt Off-Road Diesel Equipment	4.00	23.19	33.99	-	0.64
Asphalt On-Road Diesel Equipment	0.03	0.43	0.13	0.00	0.01
Asphalt Worker Trips	0.01	0.01	0.13	0.00	0.00
Total Emissions	***94.77***	***185.59***	***249.64***	***0.00***	***6.99***

Note: Subtotals may not appear to add correctly due to rounding in the URBEMIS 2002 model.
Source: Christopher A. Joseph & Associates, 2007. Calculation sheets are provided in Appendix C of this Draft EIR.

As shown, development of the Project would result in the generation of pollutant emissions. However, the GUAPCD does not currently have thresholds for determining the level of significance for air emissions. In the absence of such thresholds, any emissions that may result in a violation of an air quality standard or contribute substantially to an existing air quality violation will be considered significant. Since PM_{10} is classified as non-attainment, any PM_{10} emissions will contribute substantially to an existing air quality violation. Therefore, unless PM_{10} emissions are reduced by implementation of feasible control measures, impacts caused by these emissions would be considered significant. As a result, in the absence of mitigation measures, construction activities at the Project site would result in ***potentially significant*** air quality impacts.

Mitigation Measure AQ-1 Construction

The Project applicant shall require that the following practices be implemented by including them in the contractor construction documents to reduce the emissions of pollutants generated by heavy-duty diesel-powered equipment operating at the Project site throughout the Project construction phases:

a. Water all construction areas at least twice daily; water trucks will be filled locally after the contractor makes water acquisition agreements and obtains any required permits.

b. Cover all trucks hauling soil, sand, and other loose materials;

c. Apply clean gravel, water, or non-toxic soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites;

d. Remove excess soils from paved access roads, parking areas and staging areas at construction sites;

e. Sweep streets daily (with mechanical sweepers) if visible soil material is carried onto adjacent public streets;

f. Hydroseed or apply non-toxic soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more);

g. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);

h. Limit traffic speeds on unpaved roads to 15 miles per hour;

i. Install gravel-bags, cobble entries, or other Best Management Practices (BMPs) and erosion control measures to prevent silt runoff to public roadways;

j. Replant vegetation in disturbed areas as soon as possible;

k. Install wheel washers for all exiting trucks or wash off the tires or tracks of all trucks and equipment leaving the construction site;

l. Suspend excavation and grading activities when wind (as instantaneous gusts) exceeds 50 miles per hour (mph) and when sustained winds exceed 25 mph increase the frequency of watering from twice daily, as described in Mitigation Measure AQ-1a above, to three to four times a day;

m. The construction fleet will meet the terms set forth in the CARB Proposed Regulation for in-use Off Road Diesel Vehicles, paragraph (d)(3) Idling. The proposed regulation implementation date is May 1, 2008.

n. Limit the hours of operation of heavy duty equipment and/or the amount of equipment in use;

o. All equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications;

p. When feasible, alternative fueled or electrical construction equipment shall be used for the Project site;

q. Use the minimum practical engine size for construction equipment;

r. Gasoline-powered equipment shall be equipped with catalytic converters, where feasible; and

As shown below in Table IV.C-6, even with implementation of the recommended mitigation measures outlined above, development of the Project would continue to result in the generation of pollutant emissions. In addition, PM_{10} emissions cannot be reduced to zero with the implementation of the recommended mitigation measures. Therefore, the Project would continue to result in a ***significant and unavoidable*** impact with regard to PM_{10} emissions.

Table IV.C-6
Estimated Mitigated Daily Construction Emissions

Emissions Source	Emissions in Pounds per Day				
	ROC	**NOx**	**CO**	**SO_x**	**PM_{10}**
Phase I - Site Grading and Excavation					
Fugitive Dust	-	-	-	-	31.66
Off-Road Diesel Equipment	69.90	438.94	586.99	-	17.02
On-Road Diesel Equipment	1.09	18.89	4.03	0.04	0.546
Worker Trips	0.29	0.40	6.05	0.00	0.01
Total Emissions	***71.28***	***458.23***	***597.07***	***0.04***	***17.49***
Phase I - Building Construction Phase					
Building Construction Off-Road Diesel Equipment	2.53	97.04	20.96	-	0.92
Building Construction Worker Trips	0.64	0.31	7.34	0.00	0.16
Architectural Coatings Off-Gas	288.15	-	-	-	-
Architectural Coatings Worker Trips	0.64	0.31	7.34	0.00	0.16
Asphalt Off-Gas	0.49	-	-	-	-
Asphalt Off-Road Diesel Equipment	4.00	13.91	3.40	-	0.10
Asphalt On-Road Diesel Equipment	0.07	1.20	0.27	0.00	0.03
Asphalt Worker Trips	0.02	0.01	0.20	0.00	0.00
Total Emissions	***296.54***	***122.78***	***39.51***	***0.00***	***1.38***
Phase II - Site Grading and Excavation					
Fugitive Dust	-	-	-	-	23.29

Table IV.C-6
Estimated Mitigated Daily Construction Emissions

Emissions Source	Emissions in Pounds per Day				
	ROC	NOx	CO	SO_x	PM_{10}
Off-Road Diesel Equipment	69.71	419.86	590.14	-	14.11
On-Road Diesel Equipment	1.48	24.30	5.47	0.07	0.76
Worker Trips	0.24	0.32	5.06	0.00	0.03
Total Emissions	***71.43***	***444.48***	***600.67***	***0.07***	***38.19***
Phase II - Building Construction Phase					
Building Construction Off-Road Diesel Equipment	2.53	97.04	20.96	-	0.92
Building Construction Worker Trips	0.38	0.19	4.45	0.00	0.10
Architectural Coatings Off-Gas	65.37	-	-	-	-
Architectural Coatings Worker Trips	0.38	0.19	4.45	0.00	0.10
Asphalt Off-Gas	0.35	-	-	-	-
Asphalt Off-Road Diesel Equipment	0.40	13.91	3.40	-	0.10
Asphalt On-Road Diesel Equipment	0.05	0.85	0.19	0.00	0.02
Asphalt Worker Trips	0.02	0.01	0.20	0.00	0.00
Total Emissions	**69.48**	**112.20**	**33.65**	**0.00**	**1.25**
Phase III - Site Grading and Excavation					
Fugitive Dust	-	-	-	-	33.45
Off-Road Diesel Equipment	69.71	419.86	590.14	-	14.11
On-Road Diesel Equipment	1.63	26.80	6.04	0.07	0.84
Worker Trips	0.24	0.32	5.06	0.00	0.03
Total Emissions	***71.58***	***446.98***	***601.24***	***0.07***	***48.43***
Phase III - Building Construction Phase					
Building Construction Off-Road Diesel Equipment	2.53	97.04	20.96	-	0.92
Building Construction Worker Trips	0.55	0.26	6.33	0.00	0.14
Architectural Coatings Off-Gas	255.71	-	-	-	-
Architectural Coatings Worker Trips	0.55	0.26	6.33	0.00	0.14
Asphalt Off-Gas	0.41	-	-	-	-
Asphalt Off-Road Diesel Equipment	0.40	13.91	3.40	-	0.10
Asphalt On-Road Diesel Equipment	0.06	1.02	0.23	0.00	0.03
Asphalt Worker Trips	0.02	0.01	0.20	0.00	0.00
Total Emissions	***260.23***	***112.51***	***37.44***	***0.00***	***1.33***
Phase IV - Site Grading and Excavation					
Fugitive Dust	-	-	-	-	23.29
Off-Road Diesel Equipment	69.71	419.86	590.14	-	14.11
On-Road Diesel Equipment	0.96	12.53	3.83	0.07	0.53
Worker Trips	0.15	0.20	3.30	0.00	0.03
Total Emissions	***70.82***	***432.59***	***597.27***	***0.07***	***0.03***
Phase IV - Building Construction Phase					
Building Construction Off-Road Diesel Equipment	2.53	97.04	20.96	-	0.92
Building Construction Worker Trips	0.23	0.11	2.89	0.00	0.10
Architectural Coatings Off-Gas	64.59	-	-	-	-
Architectural Coatings Worker Trips	0.23	0.11	2.89	0.00	0.10
Asphalt Off-Gas	0.34	-	-	-	-
Asphalt Off-Road Diesel Equipment	0.40	13.91	3.40	-	0.10

Table IV.C-6
Estimated Mitigated Daily Construction Emissions

Emissions Source	Emissions in Pounds per Day				
	ROC	NOx	CO	SO_x	PM_{10}
Asphalt On-Road Diesel Equipment	0.03	0.43	0.13	0.00	0.01
Asphalt Worker Trips	0.01	0.01	0.13	0.00	0.00
Total Emissions	***68.36***	***111.62***	***30.40***	***0.00***	***1.24***

Note: Subtotals may not appear to add correctly due to rounding in the URBEMIS 2002 model.
Source: Christopher A. Joseph & Associates, 2007. Calculation sheets are provided in Appendix C of this Draft EIR.

Impact AQ-2 Operational Emissions

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities on the Project site after occupation. Stationary area source emissions would be generated by the consumption of natural gas for space and water heating devices, cooking appliances, and fireplaces, the operation of landscape maintenance equipment, the use of consumer products, and the application of architectural coatings (paints). Mobile emissions would be generated by the motor vehicles traveling to and from the Project site. In accordance with the 2007 General Plan Policy R.10.H, no solid fuel burning appliances (fireplaces) shall be permitted to be installed within any residential units within multi-unit developments within the Town of Mammoth Lakes. According to the Traffic Impact Analysis, the portion of vehicle trips that would be diverted to transit is 15 percent (see Appendix J of this Draft EIR).

The Mammoth Lakes portion of the GBVAB is designated as nonattainment for O_3 (State standard only) and as a nonattainment area for PM_{10} (State and Federal standards). As discussed previously, however, the O_3 impact in Mammoth Lakes is primarily the result of pollution generated in the San Joaquin Valley, transported by air currents and winds over the Sierra Nevada and is not a condition substantially generated by activities and sources in the Town. In fact, exceedances of the O_3 standard would likely occur without any contribution of emissions of O_3 precursors (nitrogen oxides and hydrocarbons) from Town activity. In the absence of any quantifiable thresholds of significance from the GBUAPCD, as well as the demonstrated condition in which local O_3 levels are created by emissions generated outside the Town and reach levels in excess of state standards only in the evening, the increase in O_3 precursor emissions as a result of implementation of the Project would not substantially contribute to the exceedances of the State O_3 standard.

According to the AQMP, particulate matter that causes PM_{10} violations consists primarily of road dust and soot from wood combustion. In other words, tailpipe emissions from heavy-duty diesel engines constitute a minor or negligible component of PM_{10} impacts in the Mammoth Lakes area. In addition, motor vehicle emissions such as those used in snow-removal equipment have been greatly reduced since the AQMP analysis was completed because State and Federal programs now require the use of low-sulfur diesel fuel as of 2006. When fully implemented in 2010, heavy duty on road diesel engines will be up to 95 percent cleaner than today's models. As a result, CARB estimates a 90 percent reduction in particulate emissions for new on- and off-road engines.

Nonetheless, an analysis of daily operational emissions has been prepared utilizing the URBEMIS 2002 computer model. As discussed previously, the Project would be divided into four phases. Each phase would operate successfully as a complete entity throughout the entire development. Some phases may be under construction simultaneously. Therefore, in order to accurately predict the emissions generated by activities at the Project site, the operational emissions from Phase I and the construction emissions from Phase II have been combined. This is then repeated for Phase III and Phase IV until all Phases of the Project have been completed and the entire Project is at build-out. The results of these calculations are presented in Table IV.C-7.

Table IV.C-7
Estimated Daily Operational Emissions

Emissions Source	Emissions in Pounds per Day			
	ROC	NOx	CO	SOx
Proposed Phase I Operational Emissions				
Water and Space Heating	0.78	10.80	9.07	0
Landscape Maintenance Equipment	0.75	0.03	4.68	0.00
Consumer Products	0.00	-	-	-
Architectural Coatings	1.82	-	-	-
Motor Vehicles	68.86	83.14	820.59	0.54
Phase I Total Operational Emissions	**72.21**	**93.97**	**834.34**	**0.54**
Peak Phase II Construction Emissions (Mitigated)	*71.43*	*444.48*	*600.67*	*0.07*
Total Emissions	***143.64***	***538.45***	***1435.01***	***0.61***
Proposed Phase I & II Operational Emissions				
Water and Space Heating	0.15	1.92	0.83	0
Landscape Maintenance Equipment	0.25	0.01	1.56	0.00
Consumer Products	12.23	-	-	-
Architectural Coatings	4.07	-	-	-
Motor Vehicles	13.97	15.43	166.16	0.12
Phase II Total Operational Emissions	**30.67**	**17.36**	**168.55**	**0.12**
Peak Phase III Construction Emissions (Mitigated)	*71.58*	*446.98*	*601.24*	*0.07*
Phase I Operational Emissions	*72.21*	*93.97*	*834.34*	*0.54*
Total Emissions	***174.46***	***558.31***	***1,604.13***	***0.73***
Proposed Phase I, II & III Operational Emissions				
Water and Space Heating	0.21	2.70	1.17	0
Landscape Maintenance Equipment	0.37	0.01	2.34	0.00
Consumer Products	17.12	-	-	-
Architectural Coatings	5.75	-	-	-
Motor Vehicles	18.72	20.58	221.03	0.17
Phase III Total Operational Emissions	**42.17**	**23.29**	**224.54**	**0.17**
Peak Phase IV Construction Emissions	*70.82*	*432.59*	*597.27*	*0.07*
Phase I Operational Emissions	*72.21*	*93.97*	*834.34*	*0.54*
Phase II Operational Emissions	*30.67*	*17.36*	*168.55*	*0.12*
Total Emissions	***215.87***	***567.21***	***1,824.7***	***0.90***
Proposed Phase I, II,III and IV Operational Emissions				
Water and Space Heating	0.15	1.89	0.80	0
Landscape Maintenance Equipment	0.12	0.00	0.78	0.00
Consumer Products	12.23	-	-	-
Architectural Coatings	4.02	-	-	-

Table IV.C-7
Estimated Daily Operational Emissions

Emissions Source	Emissions in Pounds per Day			
	ROC	NOx	CO	SOx
Motor Vehicles	8.53	9.04	97.36	0.12
Phase IV Total Operational Emissions	***25.05***	***10.93***	***98.94***	***0.12***
Phase I Operational Emissions	*72.21*	*93.97*	*834.34*	*0.54*
Phase II Operational Emissions	*30.67*	*17.36*	*168.55*	*0.12*
Phase III Operational Emissions	*42.17*	*23.29*	*224.54*	*0.17*
Total Emissions	***170.10***	***145.55***	***1,326.37***	***0.95***
Total (Site-Wide) Operational Emissions at Build-Out	***170.10***	***145.55***	***1,326.47***	***0.95***

Note: Subtotals may not appear to add correctly due to rounding in the URBEMIS 2002 model.
Source: Christopher A. Joseph & Associates, 2007. Calculation sheets are provided in Appendix C of this DEIR..

As CO, NO_x, ROC, and SO_x are classified as in attainment, the emissions of these pollutants would constitute ***less-than-significant*** impacts.

The impacts of PM_{10} emissions as a result of Project operations were evaluated based on the Project's compliance with the Town of Mammoth Lakes' AQMP. This plan requires that vehicle miles traveled (VMT) per day in the Town of Mammoth Lakes not exceed 106,600 and that all new residential developments be limited to one solid fuel burning appliance per unit. These requirements are based on the assumption that 23.8 grams of PM_{10} are emitted per VMT and that each EPA II solid-fuel burning appliance emits an average of 171 grams of PM_{10} per day. Based on Table J of the Traffic Impact Analysis of the is expected to generate 17,732 VMT per day upon build-out (see Appendix J of this Draft EIR). However, due to Policy R.10.H from the 2007 General Plan, no solid fuel burning appliances shall be permitted to be installed within any residential units within multi-unit developments. Therefore only one solid fuel burning appliance would be allowed in the Hotel and the Project's residential units would not contribute to PM_{10} emissions from solid fuel burning appliances. This information was used to calculate total daily PM_{10} emissions for the Project at the time of the Master Plan build-out. As shown in Table IV.C-8, the total PM_{10} emissions anticipated as a result of the Project at its completion is 422,193 grams per day. As a result, particulate emissions generated by wood combustion from the Project would not contribute to Federal and State PM_{10} violations.

Table IV.C-8
PM_{10} Emissions for the Town of Mammoth Lakes as Outlined in the AQMP

Emission Source	Quantity	Emission Rate grams/day	PM_{10} Emissions grams/day
Phase II solid-fuel burning appliances	1	171	171
Vehicle Miles Traveled	17,732	23.8	422,022
		Total PM_{10} Emissions	**422,193**

Source: Christopher A. Joseph and Associates, August 2007.

Since the AQMP thresholds of 106,600 VMT per day and one EPA II solid-fuel burning appliances per residential unit are only meant to address cumulative impacts, operational impacts from PM_{10} emissions will be addressed in the cumulative impacts section below.

Mitigation Measure AQ-2 Operational Emissions

The Project applicant shall require the following implementation measures to reduce PM_{10} operational emissions resulting from the Project to a ***less than significant*** level:

a. The Project shall include a transportation demand management program to reduce overall vehicle miles traveled (VMTs), in order to demonstrate compliance with the Federal PM_{10} standard of 150 $\mu g/m^3$. The program shall include, but not be limited to, circulation system improvements, shuttles to and from parking areas, and the location of facilities to encourage pedestrian circulation.

b. The Project shall be linked to existing developed areas through existing road networks, public transit systems, open space systems, and bicycle and pedestrian systems.

c. The Project shall implement trip reduction measures particularly during PM peak traffic hours to disperse trips between parking areas and mountain portals to and from the ski area.

d. Residential condominium units shall enter into a transit fee agreement with the Town consistent with the Town's established Transit Fee Agreement Program.

e. No solid fuel burning appliances shall be permitted within residential units within multi-family residential developments.

Impact AQ-3 Local CO Concentrations

Traffic-congested roadways and intersections have the potential to generate localized high levels of carbon monoxide (CO). By generating additional traffic, the Project could potentially cause exceedances of the 1-hour or 8-hour Federal or State CO standards. These conditions would only occur during worst-case atmospheric conditions when temperatures are very low and there is little to no wind speed. Although the Mammoth Lakes Gateway Home Center monitoring station has not recorded any exceedances of the State or Federal CO standards, elevated CO concentrations due to heavy traffic volumes and congestion at specific intersections or roadway segments are generally localized and can lead to high levels of CO, or "hot spots." For this reason, CO modeling was performed in the Project area for intersections or roadway segments currently operating at LOS D, E, or F that would be affected by Project traffic, or for intersections that would decline to LOS D, E, or F as a result of the Project (see Appendix J of this Draft EIR). Therefore, CO modeling was performed for the following roadway intersections based on the Saturday peak traffic hour:

- Minaret Road/Meridian Road (LOS D in 2017 with cumulative development); and

- Minaret Road/Main Street (LOS D in 2017 with cumulative development and Project associated mitigation)

For this analysis, CO concentrations were calculated based on a simplified CALINE4 screening procedure to determine if the Project would cause any exceedances of the State and Federal CO standards. The national 1-hour ambient air quality standard is 35.0 ppm and the State 1-hour ambient air quality standard is 20.0 ppm. The 8-hour national and state ambient air quality standard is 9.0 ppm. This methodology assumes worst-case conditions (i.e., wind direction is parallel to the primary roadway, 90 degrees to the secondary road; wind speed of less than one meter per second; and a high level of atmospheric stability or lack of change) and provides a screening of maximum, worst-case CO concentrations. Maximum CO concentrations were calculated for peak-hour traffic volumes at the intersections noted above under existing conditions, existing plus Project conditions, and cumulative conditions. Results are presented in Table IV.C-9 and Table IV.C-10.

Table IV.C-9
Summary of Localized CO Analysis (1-hour) for the Project

Intersection	1-Hour CO Concentrations (ppm)		
	Existing 2004	Existing plus Approved Projects	Cumulative w/Project (2017)
Minaret Road/Meridian Road	2.3	2.0	2.2
Minaret Road/Main Street	3.2	2.4	2.5
1-Hour Ambient Air Quality Standard	**20.0**	**20.0**	**20.0**

Source: Christopher A Joseph & Associates, 2007.
Notes: *Concentrations are based on CALINE4 outputs that are adjusted with anticipated background CO concentrations of 1.4 ppm (1-hr).*

The year 2017 was used as the date for CO emission analysis under cumulative conditions, which includes all future growth assumed in Section IV.M **(**Traffic/Circulation) of this Draft EIR. In some cases, future or cumulative CO emissions are lower than existing CO levels because vehicles are projected to improve in efficiency in the future and reduce CO emissions. Traffic conditions may also improve in the future at some intersections because of traffic improvement measures, thus reducing concentrated CO emissions. Based on the CALINE4 computer-modeling results (Table IV.C-9 and Table IV.C-10.), local CO concentrations would not exceed state or national ambient air quality standards. Therefore, emissions of CO associated with the Project would result in a ***less-than-significant*** CO air quality impact.

Table IV.C-10
Summary of Localized CO Analysis (8-hour) for the Project

Intersection	8-Hour CO Concentrations (ppm)		
	Existing 2004	Existing plus Approved Projects	Cumulative w/Project (2017)
Minaret Road/Meridian Road	1.7	1.4	1.5
Minaret Road/Main Street	2.2	1.7	1.7
8-Hour Ambient Air Quality Standard	**9.0**	**9.0**	**9.0**

Source: Christopher A Joseph & Associates, 2007.
Notes: Concentrations are based on CALINE4 outputs that are adjusted with anticipated background CO concentrations of 1.0 pm (8-hr).

Impact AQ-4 Greenhouse Gas Emissions

Parts of the Earth's atmosphere act as an insulating blanket of just the right thickness, trapping sufficient solar energy to keep the global average temperature in a suitable range. The blanket is a collection of atmospheric gases called greenhouse gases (GHG) based on the idea that the gases also trap heat like the glass walls of a greenhouse. These gases, water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N2O), ozone (O_3), chlorofluorocarbons (CFCs), hydroflourocarbons (HFCs), perflourocarbons (PFCs), and sulfur hexafluoride, as discussed and defined above, all act as effective global insulators, reflecting visible light and infrared radiation back to Earth. Human activity such as producing electricity and driving motor vehicles has elevated the concentration of these gases in the atmosphere. Many scientists believe that this in turn, is causing the Earth's temperature to rise. A warmer Earth may lead to changes in rainfall patterns, much smaller polar ice caps, a rise in sea level, and a wide range of impacts on plants, wildlife, and humans.

An individual project cannot generate enough greenhouse gas emissions to influence global climate change. However, an individual project may contribute an incremental amount of GHG emissions. For most projects, the main contribution of GHG emissions is from motor vehicles, but how much of those emissions are "new" is uncertain. New projects do not create new drivers, and therefore do not create a new mobile source of emissions. Rather, new projects only redistribute the existing traffic patterns. Larger projects will certainly affect a larger geographic area, but again, would not cause the creation of new drivers. Some mixed-use and transportation-oriented projects can actually reduce the number of vehicle miles traveled that a person drives.

Greenhouse Gas Inventory

The emissions are estimated in tons per year, which are converted to teragrams of carbon dioxide equivalents (Tg CO_2 Eq.) using the formula: Tg CO_2 Eq. = (tons of gas) x (GWP) x (0.902 metric tons of gas) / (1,000,000). One Tg is equal to one million metric tons. The global warming potential (GWP) for the gases assessed are located in Table IV.C-1.

Note that emissions models such as EMFAC and URBEMIS evaluate aggregate emissions and do not demonstrate, with respect to a global impact, how much of these emissions are "new" emissions specifically attributable to the Project in question. For most projects, the main contribution of greenhouse gas emissions is from motor vehicles, but how much of those emissions are "new" is uncertain. New projects do not create new drivers. Some mixed use and transportation-oriented projects can actually reduce the number of vehicle miles traveled that a person drives; this reduction is not typically discussed in CEQA documents. Therefore, it is anticipated that the Project will not substantially add to the global inventory of greenhouse gas emissions. This is especially true considering that the Project is adding retail uses next to residential uses. Nevertheless, greenhouse gas emissions are estimated using procedures similar to those for criteria pollutants.

Carbon Dioxide: The Project will generate emissions of carbon dioxide primarily in the form of vehicle exhaust and in the consumption of natural gas for heating from onsite combustion. Carbon dioxide emissions from vehicles were calculated with EMFAC 2007 emission factors using burden values for the South Coast Air Quality Management District. Carbon dioxide emissions from natural gas combustion were generated from guidance as presented in the Climate Leaders Greenhouse Inventory Protocol.[35] The natural gas usage came from discussions with the California Energy Commission; it is lower than default URBEMIS 2002 natural gas usage because the Project will only use natural gas for heating the buildings and for minimal hot water heating. The carbon dioxide emissions are shown in Table IV.C-11. As shown in Table IV.C-11, at build-out, the Project is estimated to emit 0.0048 Tg CO_2 Eq.

Table IV.C-11
Carbon Dioxide Emissions

Emission Source	2017
Vehicles (tons/year)	4,028.33
Natural Gas Combustion (tons/year)	1,397.37
Total (tons per year)	**5,425.70**
Total (Tg CO_2 Eq.)	***0.0048***

Methane: The Project will generate some methane gas from vehicle emissions and natural gas combustion. Methane emissions from natural gas combustion were generated using guidance as presented in the Climate Leaders Greenhouse Inventory Protocol.[36] Methane emissions from vehicles were estimated using U.S. EPA emission factors for on-highway vehicles and the same assumptions used to estimate criteria pollutants in URBEMIS 2002. The emissions are shown in Table IV.C-12. As shown in Table IV.C-12, in 2017, emissions would be 8.08E-5 Tg CO_2 Eq.

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[35] *U.S. Environmental Protection Agency, 2004b.*

[36] *Ibid.*

Table IV.C-12
Methane Emissions

Emission Source	2017
Vehicles (tons/year)	0.69
Natural Gas Combustion (tons/year)	3.58
Total (tons/year)	**4.27**
Total (Tg CO_2 Eq.)	***8.08E-5***

Nitrous Oxide: The Project generates small amounts of nitrous oxide from vehicle emissions. Emissions from natural gas combustion were generated using guidance as presented in the Climate Leaders Greenhouse Inventory Protocol.[37] Nitrous oxide from vehicles was estimated using U.S. EPA emission factors for on-highway vehicles and the same assumptions that were used to estimate criteria pollutants. The emissions are presented in Table IV.C-13. As shown in Table IV.C-13, in 2017 emissions would be 3.01E-3 Tg CO2 Eq.

Table IV.C-13
Nitrous Oxide Emissions

Emission Source	2017
Vehicles (tons/year)	10.69
Natural Gas Combustion (tons/year)	0.078
Total (tons/year)	**10.76**
Total (Tg CO_2 Eq.)	***3.01E-3***

Water Vapor: The Project does not contribute to this greenhouse gas because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks and not emissions from industrial and commercial activities.

Ozone is a greenhouse gas; however, unlike the other greenhouse gases, ozone in the troposphere is relatively short-lived and therefore is not global in nature. According to CARB, it is difficult to make an accurate determination of the contribution of ozone precursors (NO_x and ROGs) to global warming.[38] Therefore, Project emissions of ozone precursors would not significantly contribute to global climate change.

Chlorofluorocarbons: As mentioned previously, there is a ban on chlorofluorocarbons; therefore, the Project will not generate emissions of these greenhouse gases and is not considered any further in this analysis.

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[37] *Ibid.*

[38] *California Air Resources Board, 2004b.*

Hydrofluorocarbons: The Project may emit a small amount of hydroflurocarbon emissions from leakage and service of refrigeration and air conditioning equipment and from disposal at the end of the life of the equipment.[39] However, the details regarding the refrigerant used and the capacity are unknown at this time.

Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, none of which would be used by the Project. Therefore, it is not anticipated that the Project would emit any of these greenhouse gases.

Inventory Summary: The primary greenhouse gas generated by the Project would be carbon dioxide. At build-out, total unmitigated carbon dioxide equivalents would be 0.0048 Tg CO_2 Eq., which is 0.0009 percent of California's 2004 emissions (0.0048 Tg CO_2 Eq. divided by 492 Tg CO_2 Eq. = 0.0000097 * 100 = 0.0009 percent). The Town and the Great Basin Unified Air Pollution Control District currently do not have greenhouse gas inventories.

Compliance with Strategies

California Governor Arnold Schwarzenegger announced on June 1, 2005 through Executive Order S-3-05 GHG emission reduction targets as follows: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. AB 32, as discussed above, requires that by January 1, 2008, CARB shall determine what the statewide greenhouse gas emissions level was in 1990, and approve a statewide greenhouse gas emissions limit that is equivalent to that level, to be achieved by 2020. However, it should be noted that at the time of publication of this document, the CARB had not yet published the quantified 1990 GHG emissions inventory.

Therefore, the California Environmental Protection Agency prepared a Climate Action Team Report (CAT Report) that "proposes a path to achieve the Governor's targets that will build on voluntary actions of California business, local government and community actions, and State incentive and regulatory programs."[40] The CAT Report introduces strategies to reduce California's emissions to the levels proposed in Executive Order S-3-05. Under AB 32, CARB has the primary responsibility for reducing GHG emissions. However, the CAT Report contains strategies that many other California agencies can utilize. These strategies are presented in Table IV.C-14, below. As shown, the Project complies with all feasible and applicable measures to bring California to the emission reduction targets. However, as no thresholds of significance pertaining to GHG emissions have been adopted by the Town or established by the State, no determination on the significance of this impact has been made.

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[39] *U.S. Environmental Protection Agency, 2004c.*

[40] *California Environmental Protection Agency, Climate Action Team Report, 2006.*

Table IV.C-14
Project Compliance with 2006 CAT Report Greenhouse Gas Emission Reduction Strategies

STRATEGY	PROJECT COMPLIANCE
California Air Resources Board	
Vehicle Climate Change Standards: AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the CARB I September 2004.	**Consistent.** Following a phase-in period, the majority of the vehicles that access the Project would be expected to be in compliance with any vehicle standards that CARB adopts.
Other Light Duty Vehicle Technology: New standards would be adopted to phase in beginning in the year 2017 model year.	**Consistent.** Following a phase-in period, the majority of the vehicles that access the Project would be expected to be in compliance with any vehicle standards that CARB adopts.
Diesel Anti-Idling: In July 2004, the CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.	**Consistent.** Mitigation C-1 ensures that diesel trucks accessing the Project site will idle for 5 minutes or less.
Hydrofluorocarbon Reduction: 1) Ban retail sale of HFC in small cans; 2) Require that only low GWP refrigerants be used in new vehicular systems; 3) Adopt specifications for new commercial refrigeration; 4) Add refrigerant leak-tightness to the pass criteria for vehicular inspection and maintenance programs; 5) Enforce federal ban on releasing HFCs.	**Consistent.** This measure applies to consumer products. When CARB adopts regulations for these reduction measures, any products that the regulations cover will comply with the measures.
Alternative Fuels: Biodiesel Blends: CARB would develop regulations to require the use of 1 to 4 percent biodiesel displacement of California diesel fuel.	**Not Applicable.**
Alternative Fuels: Ethanol: Increased use of ethanol fuel.	**Not Applicable.**
Heavy-Duty Vehicle Emission Reduction Measures: Increased efficiency in the design of heavy duty vehicles and an education program for the heavy duty vehicle sector.	**Consistent.** These are CARB enforced standards; vehicles that access the Project that are required to comply with the standards will comply with the strategy.
Reduced Venting and Leaks on Oil and Gas Systems: Rule considered for adoption by the Air Pollution Control Districts for improved management practices.	**Not Applicable.**
Hydrogen Highway: The California Hydrogen Highway Network (CA H2 Net) is a State initiative to promote the use of hydrogen as a means of diversifying the sources of transportation energy.	**Not Applicable.**
Achieve 50% Statewide Recycling Goal: Achieving the State's 50 percent waste diversion mandate as established by the Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48% has been achieved on a statewide basis. Therefore, a 2% additional reduction is needed.	**Consistent.** During operation, the on-site facilities will recycle items such as cardboard boxes and paper.

Table IV.C-14
Project Compliance with 2006 CAT Report Greenhouse Gas Emission Reduction Strategies

STRATEGY	PROJECT COMPLIANCE
Zero Waste – High Recycling: Additional recycling beyond the State's 50% recycling goal.	**Not Applicable.**
Landfill Methane Capture: Install direct gas use or electricity projects at landfills to capture and use emitted methane.	**Not Applicable.**
Department of Forestry	
Urban Forestry: A new statewide goal of planting 5 million trees in urban areas by 2020 would be achieved through the expansion of local urban forestry programs.	**Not Applicable.**
Afforestation/Reforestation Projects: Reforestation projects focus on restoring native tree cover on lands that were previously forested and are now covered with other vegetative types.	**Not Applicable.**
Department of Water Resources	
Water Use Efficiency. Approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce greenhouse gas emissions.	**Consistent.** The Project does not include any major source of water consumption. However, the Project would be required to adhere to the Uniform Building Code (UBC) which requires the installation of low flow water devices in new commercial development.
California Energy Commission (CEC)	
Building Energy Efficiency Standards in Place and in Progress: Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	**Consistent.** The Project will be required to comply with the updated Title 24 standards for building construction including exterior lighting requirements, as applicable. Some of the changes required in the new standard include requirements for indoor lighting efficiency, skylights in 'Big Box' stores with controls to shut off lights when daylight is available, cool roof coating requirements, duct insulation, and efficient space conditioning.
Appliance Energy Efficiency Standards in Place and in Progress: Public Resources Code 25402 authorizes the Energy Commission to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	**Consistent.** Appliances that are purchased for the Project will be consistent with existing energy efficiency standards.
Cement Manufacturing: Cost-effective reductions to reduce energy consumption and to lower carbon dioxide emissions in the cement industry.	**Not Applicable.**
Municipal Utility Strategies: Includes energy efficiency programs, renewable portfolio standard, combined heat and power, and transitioning away from carbon-intensive generation.	**Not Applicable.**
Alternative Fuels: non-Petroleum Fuels: Increasing the use of non-petroleum fuels in California's transportation sector, as recommended as recommended in the CEC's 2003 and 2005 Integrated Energy Policy Reports.	**Not Applicable.**

Table IV.C-14
Project Compliance with 2006 CAT Report Greenhouse Gas Emission Reduction Strategies

STRATEGY	PROJECT COMPLIANCE
Business Transportation and Housing	
Measures to Improve Transportation Energy Efficiency: Builds on current efforts to provide a framework for expanded and new initiatives including incentives, tools and information that advance cleaner transportation and reduce climate change emissions.	**Consistent:** The Project promotes fuel conservation through design features, which promote pedestrian traffic, and programs, which encourage public transportation use.
Smart Land Use and Intelligent Transportation Systems (ITS): Smart land use strategies encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services. Governor Arnold Schwarzenegger is finalizing a comprehensive 10-year strategic growth plan with the intent of developing ways to promote, through state investments, incentives and technical assistance, land use, and technology strategies that provide for a prosperous economy, social equity and a quality environment. Smart land use, demand management, ITS, and value pricing are critical elements in this plan for improving mobility and transportation efficiency. Specific strategies include: promoting jobs/housing proximity and transit-oriented development; encouraging high density residential/commercial development along transit/rail corridor; valuing and congestion pricing; implementing intelligent transportation systems, traveler information/traffic control, incident management; accelerating the development of broadband infrastructure; and comprehensive, integrated, multimodal/intermodal transportation planning.	**Consistent:** The Project locates retail next to residential land uses, which is considered smart land use. Because the Project is locating retail next to residential, the Project is potentially reducing the number of vehicle miles traveled. In addition, the Project is located on a transit route, which has the potential to reduce trips as well. The Project provides goods to those located near the Project site thereby improving the efficiency of goods movement.
Department of Food and Agriculture	
Enteric Fermentation: Cattle emit methane from digestion processes. Changes in diet could result in a reduction in emissions.	**Not Applicable.**
State and Consumer Services Agency	
Green Buildings Initiative: Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as compared with 2003 levels. The Executive Order and related action plan	**Consistent.** As discussed above, the Project is initiating energy efficiency under what is required by Title 24. In addition, 2005 Title 24 amendments are 8.5 percent more efficient than those in 2001.

Table IV.C-14
Project Compliance with 2006 CAT Report Greenhouse Gas Emission Reduction Strategies

STRATEGY	PROJECT COMPLIANCE
spell out specific actions state agencies are to take with state-owned and –leased buildings. The order and plan also discuss various strategies and incentives to encourage private building owners and operators to achieve the 20 percent target.	
Public Utilities Commission (PUC)	
Accelerated Renewable Portfolio Standard: The Governor has set a goal of achieving 33 percent renewable in the State's resource mix by 2020. The joint PUC/Energy Commission September 2005 Energy Action Plan II (EAP II) adopts the 33 percent goal.	**Not Applicable.**
Investor-Owned Utility: This strategy includes energy efficiency programs, combined heat and power initiative, and electricity sector carbon policy for investor owned utility.	**Not Applicable.**
Source: Summarized from Climate Action Team Report, 2006.	

Impact AQ-5 Odors

Construction activities could generate airborne odors associated with the operation of construction vehicles (e.g., diesel exhaust) and the application of architectural coatings. However, these emissions would occur during daytime hours only for limited periods and would be restricted to the immediate vicinity of the construction site and activity. The wind would also tend to disperse odors, and such activities would not affect a substantial number of people and would result in a ***less than significant*** impact.

Typical operational uses that may result in significant odor impacts include wastewater treatment plants, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing, fiberglass manufacturing, painting/coating operations, rendering plants, and coffee roasters. None of these types of uses are proposed in the Project area; therefore, creation of objectionable odors would not be a likely impact of the Project.

CUMULATIVE IMPACTS

Impact AQ-6 Cumulative Impacts

The Great Basin Unified Air Pollution Control District (GBUAPCD or District) does not have numerical thresholds to determine whether the Project would result in a cumulatively considerable net increase of PM_{10} or 0_3 precursors. However, as discussed above, 0_3 impacts are primarily the result of pollution generated in the San Joaquin Valley. Thus, the cumulative increase of 0_3 precursor emissions as a result

of construction and operation of the proposed and related projects would not substantially contribute to the exceedances of the State 0_3 standard and, thus, would not be cumulatively considerable.

According to the Town's General Plan Update EIR, the increases in PM_{10} emissions associated with both construction and operation of the proposed and related projects would be considered cumulatively considerable even without development of the Project.[41] Since the Project's construction impact with regard to PM_{10} emissions would remain significant and unavoidable, the Project's cumulative construction impact on air quality would also be considered ***significant and unavoidable***.

Based on Table J of the Traffic Impact Analysis, the Project is expected to generate 17,732 VMT per day upon build-out (see Appendix J of this Draft EIR). Cumulative VMT for 2009 without the Project is expected to be 93,983 VMT per day. Therefore, total cumulative estimated VMT upon Project build-out is 111,715. This number exceeds the limit of 106,600 VMT set by the AQMP by 5,115 VMT per day. However, the 2007 General Plan Policy R.10.H prohibits the installation of all solid fuel burning appliances within any multi-unit development. Therefore, none of the 1,050 Project units would have solid-fuel burning appliances.

Based on this information, the net increase in PM_{10} emissions contributed by the Project was calculated assuming that each VMT would emit 23.8 grams of PM_{10} and that each solid-fuel burning appliance would emit 171 grams of PM_{10} per day. Therefore, the additional 5,115 VMT per day would emit 121,737 grams of PM_{10} per day more than was planned for in the AQMP. However, since none of the Project's 1,050 planned residential units will have solid-burning appliances, there will be a reduction of 179,550 grams per day in the Town's daily PM_{10} emissions. As shown in Table IV.C-15, net emissions for the Project are 57,813 less than anticipated in the AQMP. Since net emissions are less than anticipated, the Project is consistent with the AQMP for the Town of Mammoth Lakes. Therefore, cumulative operational impacts for the Project would be ***less than significant.***

Table IV.C-15
Net emissions of PM_{10} from Snowcreek VIII

Emission Source	Quantity	Emission Rate grams/day	PM_{10} Emissions grams/day
Amount of VMT over 106,600[a]	5,115	23.8	121,737
Phase II solid-fuel burning appliances[b]	-1,050	171	-179,550
		Net PM_{10} Emissions	**-57,813**

a) Based on the Traffic Impact Analysis provided in this Draft EIR.
b) Based on the assumption that no solid-fuel burning appliances will be installed in new developments
Source: Christopher A. Joseph and Associates, August 2007.

[41] *Town of Mammoth Lakes, General Plan Update EIR, October 2005, p. 4-41.*

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Construction Impacts

As stated above, implementation of construction mitigation measures would reduce construction-related air quality emissions. However, because the region is in non-attainment for PM_{10}, any generation of PM_{10} emissions during construction of the Project would result in a ***significant and unavoidable*** impact.

Operational Impacts

Implementation of the mitigation measures described above would ensure that operational emissions from the Project would be reduced to a ***less than significant*** level.

Cumulative Impacts

Since the Project's construction impact with regard to PM_{10} emissions would remain significant and unavoidable, the Project's cumulative construction impact on air quality would also be considered ***significant and unavoidable***.

The recommended Project operational mitigation measures would also reduce the cumulative emissions associated with operation of the proposed and related projects to a ***less than significant*** level.

IV. ENVIRONMENTAL IMPACT ANALYSIS
D. BIOLOGICAL RESOURCES

INTRODUCTION

This section of the Draft Environmental Impact Report (Draft EIR) provides a description of the biological resources on the Project site, including the vegetation communities, wildlife, special-status species, sensitive natural communities; a discussion of the regulations that serve to protect sensitive resources; an assessment of the potential impacts of the Project; and recommendations to minimize and mitigate potentially significant impacts on sensitive resources. Various technical reports were prepared and reviewed to analyze the potential biological resources impacts associated with the Project. These technical reports are summarized in the Backgrounds and Methods section below and are included in Appendix D of this EIR.

ENVIRONMENTAL SETTING

Regional Setting

The Project site is located within the Town of Mammoth Lakes, Mono County, California. The Town of Mammoth Lakes (Town) is located on the eastern slopes of the Sierra Nevada Mountain Range at an elevation of approximately 7,900 feet (2,410 meters) above mean sea level (msl) within Section 34, Township 3 South, Range 27 East. It is located approximately 168 miles south of Reno, Nevada, and approximately 310 miles north of Los Angeles, California. Neighboring communities of the Town include June Lake to the northwest, Benton to the east, and Tom's Place to the southeast (refer to Figure II-1 and Figure II-2). Regional access is provided by U.S. Highway 395 and California State Highway 203. Major arterial which provide access to the site include Minaret Road to the north, Fairway Drive and Old Mammoth Road in the central portions of the site, and Sherwin Creek Road to the east.

Local Setting

The Project site is located in southeast Mammoth Lakes where Old Mammoth Road intersects with Minaret Road. As previously discussed in Section II (Environmental Setting) of this Draft EIR, the Project site is approximately 237 acres in extent and is composed of Assessor's Parcel Number (APN) 40-040-20 located on the north side of Old Mammoth Road and on the west side of Minaret Road, and seven parcels (APNs: 40-070-10, 40-070-11, 40-070-12, 40-070-13, 40-070-23, 40-140-04, and 40-140-05) located on the south side of Old Mammoth Road (refer to Figure II-1 through Figure II-3). The parcel north of Old Mammoth Road and west of Minaret Road comprises a total of approximately 38-acres. Of this acreage, the approved Snowcreek VII development encompasses approximately 23 acres of the southwest portion of the parcel, and land designated as open space encompasses approximately 15 acres of the northeast portion. The seven parcels south of Old Mammoth Road comprise a total of approximately 222 acres, of which approximately 56 acres (APN 40-070-23) is occupied by the existing nine-hole golf course. The Project site is bounded to the south and east by United States Forest Service

(USFS) land that is heavily used for both summer and winter recreation activities and to the north and west by residential developments. The overall terrain of the site is relatively flat, with a slight rise along the southerly boundary. Elevations range from approximately 7,870 to 7,940 feet (2,400 to 2,420 meters). Mammoth Creek runs west to east through the northern portion of the site. The vegetation communities and wildlife habitats found on the site are basin sagebrush, willow-alder riparian, annual grasses and forbs, wet meadow, perennial grasses and forbs, tule-cattail, non-native/ornamental grass, barren (retention basins), water, and developed.

As previously discussed in Section II (Environmental Setting) and illustrated in Figure II-3 of this Draft EIR "Project site", "study area", and "development area" are used throughout this section of the Draft EIR. These terms are defined as follows:

1. **Project Site:** The Project site includes the parcel north of Old Mammoth Road and west of Minaret Road, and the seven parcels south of Old Mammoth Road.

2. **Study Area:** The study area occupies portions of the Project site, as defined above. The study area is the portion of the Project site that has been analyzed in this section of the Draft EIR. The study area is made up of the property that will be physically developed and the property that will be preserved as open space. It is essentially the same as the Project site; however it does not include the portion of APN 40-040-20 north of Old Mammoth Road that is Snowcreek VII.

3. **Development Area:** The development area is the area where physical development will occur. It is the same as the study area, but it does not include the land designated as open space and the existing golf course ponds and associated drainages.

REGULATORY FRAMEWORK

The following discussion identifies federal, state and local environmental regulations that serve to protect sensitive resources relevant to the California Environmental Quality Act (CEQA) review process.

Federal

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973, as amended, provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing as endangered or threatened under the FESA. The FESA has four major components: provisions for listing species, requirements for consultation with the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NOAA Fisheries), prohibitions against "taking" of listed species, and provisions for permits that allow incidental "take." The FESA also discusses recovery plans and the designation of critical habitat for listed species. Both the USFWS and the NOAA Fisheries share the responsibility for administration of the FESA.

During the CEQA review process, each agency is given the opportunity to comment on the potential of the Project to affect listed plants and animals.

Sensitive Species

The USFS designates plant and animal species identified by a regional forester that are not listed or proposed for listing under FESA for which population viability is a concern, as evidenced by significant current or predicted downward trend in population numbers or density, or significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution, as "sensitive." Although these species generally have no special legal status, they are given special consideration under the CEQA during project review.

Clean Water Act Section 404 & 401

The United States Army Corps of Engineers (Corps) and the United States Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). Waters of the United States are defined in Title 33 CFR Part 328.3(a) and include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The lateral limits of jurisdiction in those waters may be divided into three categories – territorial seas, tidal waters, and non-tidal waters – and is determined depending on which type of waters is present (Title 33 CFR Part 328.4(a), (b), (c)). Activities in waters of the United States regulated under Section 404 include fill for development, water resource projects (such as dams and levees), infrastructure developments (such as highways and airports) and mining projects. Section 404 of the CWA requires a federal license or permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities).

Section 401 of the Clean Water Act (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification from the state in which the discharge originates or would originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the affected waters at the point where the discharge originates or would originate, that the discharge will comply with the applicable effluent limitations and water quality standards. A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility. The responsibility for the protection of water quality in California rests with the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs).

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (16 U.S.C. Sections 661-667e, March 10, 1994, as amended 1946, 1958, 1978, and 1995) requires that whenever waters or channel of a stream or other body of water are proposed or authorized to be modified by a public or private agency under a federal license or permit, the federal agency must first consult with the USFWS and/or NOAA Fisheries and with the head of the agency exercising administration over the wildlife resources of the state where construction will occur (in this case the California Department of Fish and Game (CDFG)), with a view to conservation of birds, fish, mammals and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.

The Migratory Bird Treaty Act & Bald and Golden Eagle Protection Act

The Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.), Title 50 Code of Federal Regulations (CFR) Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." With a few exceptions, most birds are considered migratory under the MBTA. Disturbances that causes nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend would be in violation of the MBTA.

The Bald Eagle Protection Act (16 U.S.C. 668) was passed in 1940 to protect bald eagles and was later amended to include golden eagles. Under the act it is unlawful to import, export, take, sell, purchase, or barter any bald eagle or golden eagle, their parts, products, nests, or eggs. Take includes pursuing, shooting, poisoning, wounding, killing, capturing, trapping, collecting, molesting, or disturbing eagles.

State

California Endangered Species Act

The State of California enacted similar laws to the FESA, the California Native Plant Protection Act (NPPA) in 1977 and the California Endangered Species Act (CESA) in 1984. The CESA expanded upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the California Fish and Game Code. To align with the FESA, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the CESA as threatened species, but did not do so for rare plants. Thus, these laws provide the legal framework for protection of California-listed rare, threatened, and endangered plant and animal species. The CDFG implements NPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the California Natural Diversity Database (CNDDB), a computerized inventory of information on the general location and status of California's

rarest plants, animals, and natural communities. During the CEQA review process, the CDFG is given the opportunity to comment on the potential of the Project to affect listed plants and animals.

Fully Protected Species & Species of Special Concern

The classification of "fully protected" was the CDFG's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibian and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at §5515, amphibian and reptiles at §5050, birds at §3511, and mammals at §4700) dealing with "fully protected" species states that these species "…may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species," although take may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with fully protected species were amended to allow the CDFG to authorize take resulting from recovery activities for state-listed species.

Species of special concern are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFG because are declining at a rate that could result in listing or historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFG, land managers, consulting biologist, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under the CEQA during Project review.

California Fish and Game Code Sections 3503 & 3513

According to Section 3503 of the California Fish and Game Code it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (except English sparrows (*Passer domesticus*) and European starlings (*Sturnus vulgaris*)). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MTBA, prohibiting the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the CDFG.

California Native Plant Society

The California Native Plant Society (CNPS) publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version

(www.cnps.org/rareplants/inventory/6thedition.htm). The Inventory assigns plants to the following categories:

- 1A – Presumed extinct in California
- 1B – Rare, threatened, or endangered in California and elsewhere
- 2 – Rare, threatened, or endangered in California, but more common elsewhere
- 3 – Plants for which more information is needed
- 4 – Plants of limited distribution

Additional endangerment codes are assigned to each taxa as follows:

- 1 – Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat).
- 2 – Fairly endangered in California (20-80% occurrences threatened).
- 3 – Not very endangered in California (<20% of occurrences threatened or no current threats known).

Plants on Lists 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing, and are given special consideration under CEQA during Project review. Although plants on List 3 and 4 have little or no protection under CEQA, they are usually included in the Project review for completeness.

Porter-Cologne Water Quality Control Act

Waters of the State are defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These waterbodies have high resource value, are vulnerable to filling, and may not be regulated by other programs, such as Section 404 of the CWA. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program, which regulates discharges of dredged and fill material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Corps permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the Water Quality Certification Program. If a proposed project does not require a federal license or permit, but does involve activities that may result in a discharge of harmful substances to waters of the State, the RWQCB has the option to regulate such activities under its State authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements.

California Fish and Game Code Section 1600

Streams, lakes, and riparian vegetation as habitat for fish and other wildlife species, are subject to jurisdiction by the CDFG under Sections 1600-1616 of the California Fish and Game Code. Any activity that will do one or more of the following: 1) substantially obstruct or divert the natural flow of a river,

stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake; generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream", which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife.[1] Riparian is defined as, "on, or pertaining to, the banks of a stream;" therefore, riparian vegetation is defined as, "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself."[2] Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFG.

Sensitive Vegetation Communities

Sensitive vegetation communities are natural communities and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by federal, state, and local conservation plans, policies or regulations. The CDFG ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in its CNDDB. Sensitive vegetation communities are also identified by CDFG on its List of California Natural Communities Recognized by the CNDDB. Impacts to sensitive natural communities and habitats identified in local or regional plans, policies, regulations or by federal or state agencies must be considered and evaluated under the CEQA (CCR: Title 14, Div. 6, Chap. 3, Appendix G).

Local

In addition to federal and state regulations, the Town's General Plan defines certain goals, policies, and implementation measures protecting natural resources. Also, the Town has adopted various codes and ordinances that provide protection to natural resources within the Town's limits.

Town of Mammoth Lakes General Plan

The Town's current General Plan was adopted in 1987. The 1987 General Plan is currently in the process of being updated following a four-year planning and review process. A Draft Program EIR was

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[1] *California Department of Fish and Game. Environmental Services Division (ESD). 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code.*

[2] *California Department of Fish and Game. Environmental Services Division (ESD). 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code.*

previously prepared and circulated regarding an earlier version of the General Plan Update. A Notice of Preparation (NOP) for the Draft Program EIR was distributed on April 25, 2003. A Draft Program EIR was prepared and distributed to the public for review from February to May 2005 for public comments. Based on the extent and range of comments received, the Town determined that the proposed General Plan should be revised to the extent that required recirculation of a Revised Draft Program EIR. The Revised Draft Program EIR was circulated for public review from October 31, 2005 to December 14, 2005. The Town adopted the 2007 General Plan on August 15, 2007 and is currently considering the Revised Final Program EIR on the General Plan Update for certification. Because the certification of the Revised Final Program EIR is an ongoing process, the standard for analysis used in this Draft EIR is based on both the 1987 General Plan and the 2007 General Plan. The applicable goals, policies and implementation measures protecting natural resources from the 1987 General Plan are listed below.

Natural Vegetative Resources

Goals:

1. To protect natural vegetative communities from abuse, misuse or degradation from the inappropriate use of land.
2. To encourage uses of natural areas which are compatible with maintenance of such areas.
3. To provide improved information on vegetation through inventories, mapping programs, and environmental analyses.
4. To protect vegetative resources from wildland fires.
5. To protect and preserve areas containing heritage trees or groves and mixed age stands of native trees.
6. To protect rare, endangered, or unique plant species and communities from reduction of their range and degradation of their environment.
7. To protect and enhance watershed quality.

Policies:

1. The Town shall preserve the resort-alpine character of Mammoth Lakes through the adoption of tree preservation standards which retain heritage trees[3] and groves where reasonable, and retain to the maximum extent feasible, the forest canopy and forested character of the Town. Native tree species should be planted to help offset the loss of trees unavoidably removed during construction.
2. The Town shall inventory and map all natural vegetation with an emphasis on the location and identification of rare, unique, and endangered species.

[3] *i.e., significant stands of old growth trees of unique or heritage quality, and large individual specimens.*

3. Riparian and in-channel[4] vegetation shall be preserved or restored to the maximum extent possible to protect water quality and the wildlife habitat associated with riparian corridors, through the application of design criteria and incentives in the Town Development Code.
4. The Town in coordination with Mono County, the USFS, the Mammoth Lakes Fire Protection District, and other nearby fire districts shall implement a "Fire Safe" program, similar to that endorsed by the County Board of Supervisors Association.
5. Vegetation species which are rare, unique, or endangered shall be protected from destruction or alteration to their environment which would impair their vigor.
6. Natural vegetation shall be maintained in deer migration corridors through the application of design criteria in the Town Development Code.
7. Sensitive habitat areas shall be protected through open space buffers, fencing and signage, construction of roads, trails and paths away from sensitive areas, and reduction of removal of development densities near sensitive areas.
8. Landscaping plantings shall be required to: 1) be of the native plant species they replace, and/or non-invasive, and 2) drought resistant, to the greatest extent feasible, in accordance with design criteria in the Town Development Code.
9. Landscaping plans which require intensive summer irrigation, fertilization and intensive landscaping should be discouraged by design criteria and disincentives in the Town Development Code.
10. Motorcycles, all-terrain bicycles, and other vehicles shall be restricted in ecologically sensitive areas.

Wildlife Resources

Goals:

1. To identify and avoid degradation and destruction of wildlife and natural wildlife habitats.
2. To protect the deer herds and their migration routes.
3. To conserve and develop wildlife resources which provide outdoor recreation, provide economic benefits, or have scientific or education value.

Policies:

1. Through development controls and incentives, the Town shall identify: 1) primary habitat areas which shall be protected from intrusion by development and human activity; and 2) other habitat areas in which the impact of development and human activity will be minimized.
2. The Town shall maximize the protection of primary wildlife habitats through public and/or private management programs which include: 1) requiring (encouraging) the construction of

[4] *i.e., the bank vegetation between the water's edge and the topographic break at the level of the surrounding terrain.*

active and passive recreation and development areas away from the habitat; and 2) use fences, or other barriers and buffer zones.

3. The Town shall minimize the impact of development and human activity on non-primary habitat areas through: 1) retaining of natural vegetation in proposed development areas; 2) providing buffers where necessary and design controls; 3) by enforcing leash laws and providing public information concerning the potential destruction of wildlife by domestic pets; and 4) by clustering development away from these areas to the maximum extent practicable.
4. The Town shall protect the deer herds and their migration corridors to the maximum practical extent through: a) provision of open space buffers between developments adjacent to migration corridors; b) limited construction of new roads crossing migration routes; and c) modification of existing road impacts to deer migration areas by measures which could include: 1) posting signs; 2) limiting driving speeds; and 3) devising channels for migrating animals.
5. In-stream water quality and quantity shall be maintained to preserve riparian habitats.
6. Noise level and congregation of people and/or equipment shall be kept to levels compatible with the affected species.

Water Resources

Goals:

1. To maintain and improve the quality and dependability of water sources.
2. To safeguard the productive capacity of surface and ground waters, the flood carrying capacity of streams, and the storage capacity of reservoirs.
3. To provide for the aesthetic enjoyment and other beneficial uses of Mammoth Lakes' water resources.
4. To minimize flooding, sedimentation, and water pollution so as to avoid property damage, safety hazards, and disruption of the areas' ecology.
5. To identify, preserve, and enhance selected water resources and resource areas, in response to their open space and conservation value, and their future use and enjoyment by residents and visitors.

Policies:

1. The quality and quantity of surface and ground waters should be maintained at acceptable levels as determined by appropriate agencies.
2. The Town shall retain to the maximum practical extent, primary community water-courses and bodies in their natural state, through criteria in the Town Development Code. Creek corridors shall be carefully identified, corridor setbacks established and strict regulations precluding riparian vegetation removal and creek regimen modification shall be adopted.
3. The Town shall develop a stream corridor preservation plan for the Mammoth Creek corridor. An Open Space Stream Conservation corridor (OSSC) has been designated along the creek.

4. The Town shall carefully regulate development encroachment into flood plains and the perimeter of natural waterbodies.
5. The Town shall carefully regulate construction and other activities and development, that which would cause or accelerate erosion sedimentation, water pollution, and runoff volumes.

Open Space

Goals:

1. To protect the natural and man-made resources of Mammoth Lakes for the purpose of: 1) protection of the health and safety of the community; 2) preservation of natural resources; 3) provision of outdoor recreation; and 4) management of natural resources.
2. To protect the community's natural beauty.
3. To minimize disturbance of the natural terrain and native vegetation.

Policies:

1. The Town shall develop criteria in the Town Development Code which implement the resource and open space goals and policies in this element and in the other elements and sections of the General Plan.
2. The Town shall designate Special Conservation Planning Areas within the community which have special resources and open space value as defined by policies in the General Plan and by criteria in the Town Development Code. These special conservation areas will be subject to special design and development controls set forth in the Development Code.
3. The Town may use, as appropriate, development clustering or transfers of development rights (TDRs) in areas of formally designated open space of Special Conservation Planning Areas.

Town of Mammoth Lakes Municipal Code

The Town has adopted the following codes that provide protection to natural resources within the Town's limits.

- Chapter 6.24 Feeding Wildlife Prohibited – Prohibits feeding or in any manner providing food for one or more non-domesticated mammalian predators or rodents, including but not limited to bears, mountain lions, coyotes, raccoons, mice or squirrels, except in those instances outlined in Chapter 6.24-020 (e.g., person is the owner of non-domesticated animal and possess authorization from the appropriate agency(ies) and where person provides foods for trapped, injured or unweaned non-domesticated animal between the time the agency in charge of animal control is notified and such animal is picked-up).
- Chapter 12.08 Land Clearing, Earthwork, and Drainage Facilities – Regulates work on public and private property in order to control grading, earthwork, clearing, erosion, sedimentation, drainage interference, and to promote the conservation of natural resources, including the natural

beauties of the land, streams and watersheds, hills, trees and vegetation; to protect the public health and safety; and to generally preserve the terrain and the flora in their natural state as much as possible.

- Chapter 12.28 Animal Poisoning and Trapping – Prohibits the use or attempt to use poison on any animal or use or set any trap to confine, hold, grasp, clamp, crush any animal located within the boundaries described in Section 12.28.050 located in the Town, except in those instances outlined in Chapter 12.28-030 (e.g., any officer, employee or agent or person acting with permission of the animal control department of the Town acting in his or her official capacity, any owner or lessee or renter of real property or the agent of such owner or lessee or renter may poison or trap mice, rats, rodents and other vermin of less than five pounds live body weight, etc.).
- Chapter 15.36 Water-Efficient Landscaping Regulations – Promotes the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible, establishes a structure for designing, installing, and maintaining water efficient landscapes in new projects; and establishes provisions for water management practices and water waste prevention for established landscapes.
- Chapter 17.16.050 Grading and Clearing (B) – Requires the preservation of existing trees and vegetation in all residential zones. Existing trees and vegetation shall be preserved to the maximum extent possible. No live trees over six inches in diameter shall be removed without prior approval of the planning director. The director shall base his approval upon the health of the tree(s), the necessity to remove the tree(s) because of building or driveway construction or snow removal/storage, potential hazard or solar access. Creation of views, lawns or similar amenities shall not be sufficient cause to remove native trees. As mitigation for tree removal, the planning director may require replacement plantings. Required replacement shall not exceed a total trunk diameter equal to that removed and shall be limited to plantings in areas suitable for tree replacement.
- Chapter 17.34 Outdoor Lighting – Provides rules and regulations for outdoor lighting within the Town to promote safe and pleasant nighttime environment for residents and visitors; to protect and improve safe travel for all modes of transportation; to prevent nuisances cause by unnecessary light intensity, direct glare, and light trespass; to protect the ability to view the night sky by restricting unnecessary upward projection of light; to phase out existing non-conforming fixtures that violate this chapter, including those owned by the Town and other public agencies, and to promote lighting practices and systems to conserve energy.

BACKGROUND AND METHODS

The applicant's consultants completed the following biological resources reports for the Project site.

- *Snowcreek 7 – Preliminary Biological Assessment* prepared by Denise Duffy & Associates, Inc., October 20, 2005.

- *Snowcreek 8 – Biological Assessment* prepared by Denise Duffy & Associates, Inc., October 11, 2006.
- *Snowcreek 8 – Addendum to Biological Assessment* prepared by Denise Duffy & Associates, Inc., November 16, 2006.
- *Hilltop Site – Snowcreek Area 7 Wetland Delineation Report* prepared by Resource Concepts, Inc., August 2005.
- *Identification/Delineation of Wetlands on a Portion of Snowcreek Resort Property in Mammoth Lakes (Mono County), California* prepared by D.R. Sanders and Associates, Inc., June 27, 2002.

The general purpose of the biological assessments prepared by Denise Duffy & Associates, Inc. (DD&A) was to (1) provide a description of the existing biological conditions of the site, (2) determine the potential for special-status plant and animal species and sensitive habitats to occur on the site, (3) identify potential impacts to biological resources that may occur as a result of the Project, and (4) provide avoidance and minimization measures to reduce potential impacts. DD&A reviewed available background information pertaining to the biological resources in the vicinity of the Project site and conducted general vegetation and animal surveys on the site on August 8-10, 2005. On August 24, 2006 DD&A revisited a portion of the site to determine whether existing conditions had changed since their previous surveys.

The wetland delineations on the site evaluated the nature and extent of areas that could be considered jurisdictional waters of the United States, including wetlands. Resource Concepts, Inc. (RCI) completed the wetland studies on the northernmost parcel (APN 40-040-20) of the site, located on the north side of Old Mammoth Road, on July 19, 2005, while D.R. Sanders and Associates, Inc. (DRSA) completed the studies on a portion of the parcels located on the south side of the Old Mammoth Road on May 8-9, 2002. DRSA surveyed five of the seven parcels (APN 40-070-10, 40-070-11, 40-070-12, 40-140-04, and 40-140-05).

The EIR consultant, Christopher A. Joseph & Associates (CAJA), reviewed the biological resources reports mentioned above to verify the adequacy, completeness, and accuracy of these reports for their use in this section of the Draft EIR. CAJA also conducted a field reconnaissance of the study area on October 25, 2006 to evaluate the impacts of the Project on biological resources. The methods used to assess the biological resources in the study area are described in more detail below. Prior to conducting the field reconnaissance, CAJA also reviewed the following background documents.

- *Proposed Draft Environmental Impact Report for Snowcreek at Mammoth* prepared by Urbanomic Research Associates, August 1974.
- *Draft Environmental Impact Report for the Updated Master Plan for Snowcreek at Mammoth Lakes* prepared by Triad Engineering, April 1981.
- *The Town of Mammoth Lakes General Plan* prepared by the Town of Mammoth Lakes, October 1987.

- *Final Environmental Impact Statement for Sherwin Ski Area* prepared by the United States Department of Agriculture, Forest Service, 1990.
- *Final Environmental Impact Statement for the Proposed Snowcreek Golf Course Expansion Project* prepared by the United States Department of Agriculture, Forest Service, June 1997.
- *Draft Environmental Impact Report/Environmental Impact Statement for the Proposed Changes in Mammoth Creek Instream Flow Requirements, Change of Point of Measurement, and Change of Place of Use*, prepared by CH2MHill/Sacramento, November 2000.
- *Snow Creek Land Exchange Environmental Assessment* prepared by the United States Department of Agriculture, Forest Service, Pacific Southwest Region, Inyo National Forest, 2003.
- *Revised Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update* prepared by the Town of Mammoth Lakes, October 2005.

CAJA also contacted representatives for the Corps, CDFG, and the RWQCB to discuss the Project and potential impacts on jurisdictional resources.

Vegetation Communities

The vegetation communities identified in the study area are classified, based on the USFS's CALVEG (Classification and Assessment with Landsat of Visible Ecological Groupings) system.[5] The CALVEG system is a hierarchical classification system of vegetation designed to assess vegetation-related resources throughout California. The Pacific Southwest Region of the USFS initiated this system in the late 1970s to describe and map natural vegetation within the state.

Special Status Species

For the purposes of this analysis, special-status species include those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS or NOAA Fisheries under the FESA; those listed or proposed for listing as rare, threatened, or endangered by the CDFG under the CESA; plants occurring on List 1A, List 1B, and List 2 of the CNPS Inventory; plants and animals designated as "species of special concern" or "fully protected" by the CDFG; and plants and animals designated as "sensitive" by the USFS.

The potential occurrence of special-status species in the study area was evaluated by first developing a list of special-status plants and animals that are known to or have the potential to occur in the vicinity of the Project site based on a search of the CNDDB and CNPS Electronic Inventory records, including the Old Mammoth (434B) U.S. Geological Service (USGS) 7.5-Minute Quadrangle and the eight surrounding

[5] *U.S. Forest Service. The CALVEG System. Accessed November 28, 2006. Available from http://www.fs.fed.us/r5/rsl/projects/classification/system.*

USGS quadrangles[6,7] and review of the USFWS List of Listed, Proposed, and Candidate Species Which May Occur in Mono County,[8] *The Town of Mammoth Lakes General Plan,*[9] and *The Town of Mammoth Lakes 2005 General Plan Update Draft EIR.*.[10] Each species was then evaluated for its potential to occur in the study area according to the following criteria:

(1) **No**. Species listed as having "no" potential to occur in the study area are those species for which:

- There is no suitable habitat present in the study area (i.e., habitats in the study area are unsuitable for the species requirements (e.g., foraging, breeding, cover, substrate, elevation, hydrology, plant community, disturbance regime, etc.).
- The study area has been surveyed during the proper time of year with negative results for the species.

(2) **Low**. Species listed as having a "low" potential to occur in the study area are those species for which:

- There are no known records of occurrence in the vicinity of the Project site; and/or
- There is marginal or very limited suitable habitat present in the study area;

(3) **Medium**. Species listed as having a "medium" potential to occur in the study area are those species for which:

- There are known records of occurrence in the vicinity of the Project site; and/or
- There is marginal suitable habitat present in the study area.

(4) **High**. Species listed as having a "high" potential to occur in the study area are those species for which:

- There are known records of occurrence in the vicinity of the Project site (there are many records and/or records in close proximity); and/or

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6 *California Department of Fish and Game. 2006 California Natural Diversity Database (CNDDB) Rarefind [CD-ROM], Wildlife Habitat Data Analysis Branch, California Department of Fish and Game. Sacramento: California.*

7 *California Native Plant Society. 2006. Inventory of Rare and Endangered Plants (online edition, v7-06d). California Native Plant Society, Sacramento. Accessed on November 6, 2006 from http://cnps.org/inventory.*

8 *U.S. Fish and Wildlife Service. November 6, 2006. Listed, Proposed, and Candidate Species which May Occur in Mono County. Ventura (CA): Ventura Fish and Wildlife Office. Accessed November 6, 2006. Available from http://www.fws.gov/ventura/esprograms/listing%5Fch/*

9 *Town of Mammoth Lakes. 1987. Town of Mammoth Lakes General Plan.*

10 *Town of Mammoth Lakes. 2005. Revised Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update.*

- There is suitable habitat present in the study area.

(5) **Present**. Species listed as "present" in the study area are those species for which:

- The species was observed in the study area.

Table IV.D-1, beginning on page 24, presents the list of special-status plants and animals that are known to or have the potential to occur in the vicinity of the Project site, their habitat requirements, and a rating of potential for occurrence in the study area. Only those species identified as having a "medium" or "high" potential to occur in the study area, and those identified as "present" are discussed further in this section of the Draft EIR.

Sensitive Natural Communities

Sensitive natural communities include those such as riparian habitats, wetlands, and habitats for protected species. These communities are usually identified in local or regional plans, policies, or regulations, or by federal or state agencies (e.g., USFWS, Corps, CDFG, RWQCB). Vegetation communities and wildlife habitats identified in the study area were evaluated to determine if they are considered sensitive by local, state, or federal agencies. The specific methods used to determine potential presence of sensitive natural communities are described in more detail below.

Riparian Habitat

A review of aerial photographs and Project site photographs, and an on-site inspection of the drainages, ponds, and other aquatic features was conducted to determine if the banks of these features support hydrophytic or stream-dependent woody plant species (i.e., riparian species). In addition, the biological and wetland assessments were reviewed to determine whether riparian habitat was noted during surveys conducted by the applicant's consultants.

Waters of the United States & Waters of the State

The presence and extent of waters of the United States and waters of the State in the study area were inferred by reviewing the wetland delineation reports completed by the applicant's consultants and the following letters from the Corps to the applicant regarding the extent of its jurisdiction on the Project site, pursuant to Section 404 of the CWA.

- *U.S. Army Corps of Engineers, Letter to Chadmar Group, Resource Concepts, Inc. February 1, 2006. File Number 200600051-BAH.*
- *U.S. Army Corps of Engineers, Letter to Dempsy Construction Corporation. October 17, 2002.*
- *U.S. Army Corps of Engineers, Letter to Dempsy Construction Corporation. July 8, 2003.*

The delineations were based on the technical guidelines and methods in the *1987 Corps of Engineers Wetland Delineation Manual.*[11] Under these procedures, an area is a wetland if positive wetland indicators are present for each of the three wetland parameters – (1) vegetation, (2) soil, and (3) hydrology. If positive wetland indicators cannot be determined for any one of these parameters, the area is not a wetland. In the absence of adjacent wetlands, the Corps jurisdiction extends to the ordinary high water mark (OHWM) of the water. Because the delineations did not encompass all portions of the Project site, CAJA conducted a reconnaissance-level survey of those portions of the study area that were not evaluated.

EXISTING CONDITIONS

Vegetation Communities and Wildlife Habitats

Vegetation communities and wildlife habitats identified in the study area are described below and illustrated in Figure IV.D-1. Plant species identified during general vegetation and animal surveys conducted by the applicant's consultant are listed in Appendix D. As discussed above in the Background and Methods section, descriptions below are derived from the CALVEG classification system, except where specific comments are made regarding conditions in the study area.

Basin Sagebrush

Basin sagebrush is found within a wide elevation range, mainly from 3,600 to 9,800 feet (1,098 to 2,990 meters), and is very prominent on the eastern slopes of the Sierras and on the Kern plateau. Basin sagebrush is usually found on frigid soils having little or no soil profile development and in coarse depositional areas. In the study area, basin sagebrush is one of the primary vegetation communities in the development area and is located in topographically higher locations. Basin sagebrush (*Artemisia tridentata*) is the dominant shrub in this vegetation community in the study area; common associated shrubs include gray rabbitbrush (*Chrysothamnus nauseosus*) and bitterbrush (*Purshia tridentata*), as well as other scattered native shrubs such as mountain snowberry (*Symphoricarpus vaccinoides*) and squaw currant (*Ribes cereum*). The relatively open shrub canopy in this community includes areas of bare ground, as well as sparsely distributed perennial and annual grasses and forbs. There are also Jeffrey pine (*Pinus jeffreyi*) and lodgepole pine (*Pinus contorta*) scattered throughout the basin sagebrush in the study area.

Willow-Alder Riparian

Willow-alder riparian vegetation is generally found along streams or in seepage areas in the northern Sierras, at elevations generally between 2,600 and 7,000 (792 and 2,130 meters). In the study area,

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[11] *Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-7, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss..*

willow-alder riparian vegetation is found outside of the development area, primarily along Mammoth Creek in the open space area; however, small patches are also found around the existing golf course ponds. Willow (*Salix lucida, S. planifolia*) is the dominant tree in this vegetation community, forming somewhat dense canopy, with patches of mountain alder (*Alnus tenuifolia*) and quaking aspen (*Populus tremuloides*) occurring throughout. The understory is generally sparse and consists of perennial grasses and wetland forbs.

Annual Grasses and Forbs

Annual grasses and forbs are generally found in areas which have been disturbed or burned, and are found at a wide variety of elevations and soil types. In the study area, this vegetation community is found within the development area, predominantly in the vicinity of Fairway Drive where previous development activities associated with nearby residences and the golf course have likely disturbed the previously existing natural vegetation. In the *Snowcreek 8 – Biological Assessment,* this area was mapped as developed/disturbed; however, it has been reclassified for the purposes of this section of the Draft EIR to more closely match the vegetation community descriptions in the CALVEG system. Areas of cleared or stockpiled dead vegetation were observed within this community near Fairway Drive. Annual grasses and forbs vegetation is dominated by non-native annual grasses, such as foxtail barley (*Hordeum jubatum*) and wild oat (*Avena* sp.), as well as non-native forbs including toadflax (*Linaria* sp.) and mustard (*Brassica* sp.). Native species observed interspersed through this vegetation community include basin sagebrush, gray rabbitbrush, squirreltail (*Elymus elymoides*), and yarrow (*Achillea* sp.).

Wet Meadow

Wet meadow is generally found in low-lying areas or depressions near a perennial water source, such as a lakeshore or stream bank, or where the water table is near the surface year round. In the study area, this vegetation community is found outside of the development area and is adjacent to the willow-alder riparian community associated with Mammoth Creek in the open space area. The wet meadow is within the area designated as open space. Wet meadow vegetation in the study area is composed of sedge (*Carex jonesii, C. lasiocarpa, C. nebrascensis*) and Baltic rush (*Juncus balticus*), and contains other perennial forbs such as corn lily (*Veratrum californicum*), cow parsnip (*Heracleum sphondylium*), meadow lupine (*Lupinus polyphyllus*), willow herb (*Epilobium* sp.). Grasses present in this community include reedgrass (*Calamagrostis canadensis*) and bentgrass (*Agrostis idahoensis*).

Perennial Grasses and Forbs

Perennial grasses and forbs are generally found in dry to moist grassland or meadows, in which it is difficult to determine species composition, and it is often difficult to separate it from the wet meadows and alpine grasses and forbs communities. Perennial grasses and forbs communities generally are within elevations of about 6,800 to 11,200 feet (2,074 to 3,416 meters), spanning the mid-montane to alpine regions. In the study area, this vegetation community is found within the development area,

predominantly in the southern portion of the study area east of Fairway Drive. In the *Snowcreek 8 – Biological Assessment*, this area was mapped as meadow; however, it has been reclassified for the purposes of this document to more closely match the vegetation community descriptions in the CALVEG system. This community is dominated perennial grasses such as creeping wild rye (*Leymus triticoides*), squirreltail, and needlegrass (*Achnatherum* spp.), as well as Baltic rush, Nebraska sedge (*Carex nebrascensis*), and Rocky Mountain iris (*Iris missouriensis*). Other annual grasses and forbs are present throughout.

Tule-Cattail

Tule-cattail vegetation occurs around the margins of lakes and springs that are permanently flooded and usually accumulate deep, peaty soils. In the study area, this vegetation community is found outside of the development area along the edges of a few constructed ponds on the golf course, and within shallow artificial drainages connecting these ponds. The tule-cattail vegetation in the study area is dominated by cattails (*Typha* sp.), but also supports sedges, rushes, and a few quaking aspen and willow.

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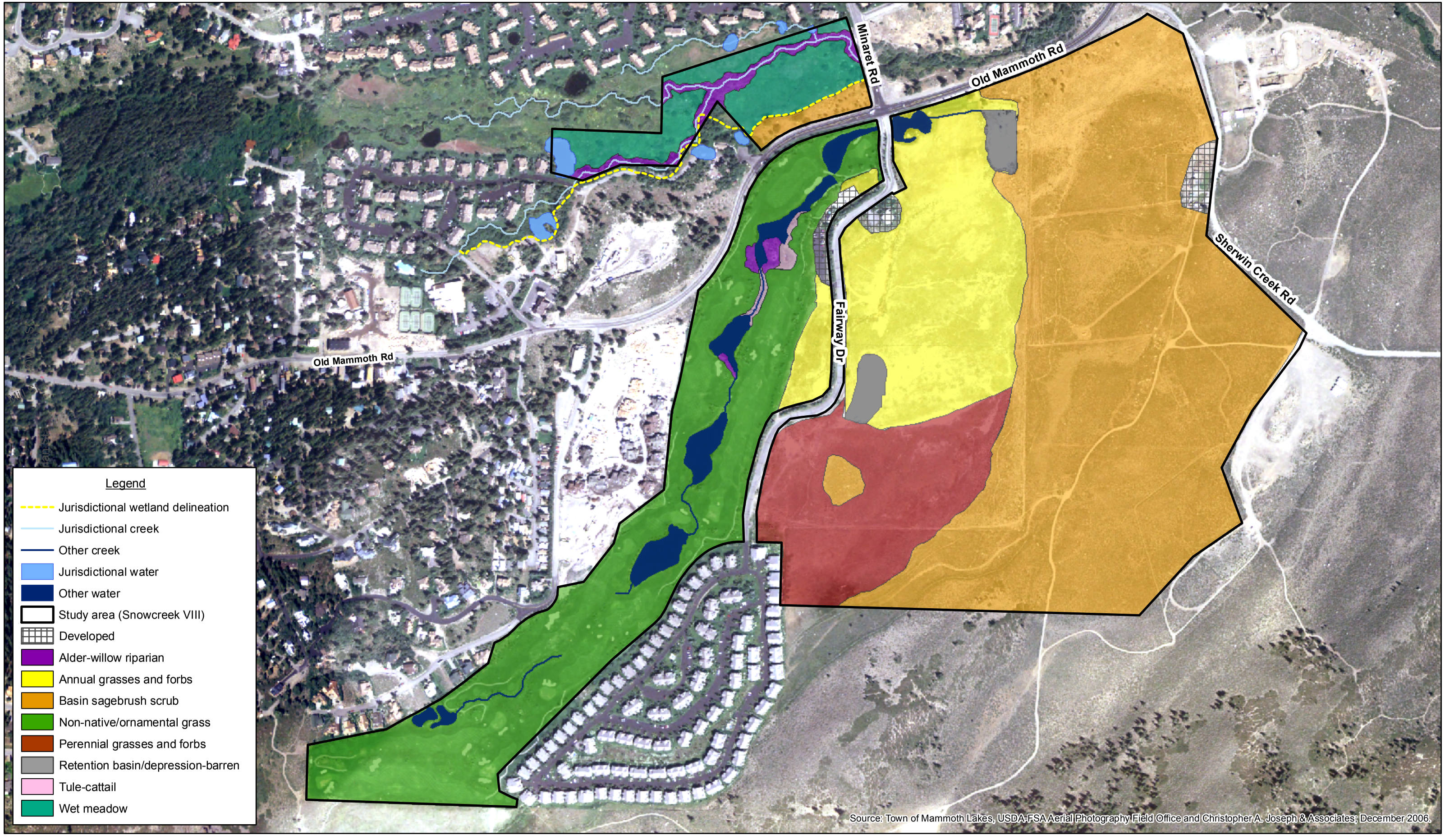

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

NORTH

0 500 1,000 1,500 2,000
Feet

Figure IV.D-1
Plant Communities

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Non-native/Ornamental Grass

Non-native/ornamental grass occurs in association with heavily landscaped areas such as urban and residential developments, parks, recreational areas, highways, cemeteries, and golf courses. In the study area, this vegetation community is found within the development area on the existing nine-hole golf course, and is composed of managed turfgrass. Associated landscape trees and shrubs are found within and surrounding the golf course.

Barren (Retention Basins)

Landscapes generally devoid of vegetation are labeled as barren, including areas in which surface lithology is dominant, such as exposed bedrock, cliffs, interior sandy or gypsum areas, and the like. It does not include areas considered as modified or developed, as in urban areas. In the *Snowcreek 8 – Biological Assessment*, these areas were mapped as retention basins; however, they have been somewhat reclassified for the purposes of this section of the Draft EIR to more closely match the descriptions in the CALVEG system. In the study area, barren areas are found within the development area in the two retention basins; one active basin south of Old Mammoth Road, which receives overflow water from the golf course ponds, and one former basin east of Fairway Drive, which no longer regularly receives or holds water. These basins are generally unvegetated and consist of exposed, pale silty soil and/or cobbles. Scattered willows (*Salix* spp.) are present in the retention basin south of Old Mammoth Road.

Water

Water consists of areas of permanent or nearly permanent water, including lakes, streams canals and similar water bodies. These areas are generally unvegetated except along the edges, which may support tule-cattail, wet meadow, or riparian vegetation. In the study area, water is found outside the development area within Mammoth Creek and several ponds near Mammoth Creek in the open space area, as well as the golf course ponds and associated drainages.

Developed

Developed areas are dominated by urban structures, residential units, or other developed land use elements such as highways, city parks, cemeteries and the like. In the study area, developed areas are found in the development area and include the Snowcreek Sales Office, golf course parking lots and structures, and the USFS pack station along Sherwin Creek Road.

Wildlife

The vegetation communities present in the study area and the surrounding area likely provides habitat for a wide variety of wildlife species. Basin sagebrush is generally very important to wildlife because it often serves as habitat for some of the more important game animals and occupies such a vast area. It is a major winter-range habitat for migratory mule deer (*Odocoileus hemionus*) herds. Riparian communities

have an exceptional high value for wildlife species, providing water, thermal cover, movement corridor, and diverse nesting and feeding opportunities. Adjacent waters and ponds provide suitable habitat for aquatic species (e.g., brown trout [*Salmo trutta*], rainbow trout [*Oncorhynchus mykiss*], western toad [*Bufo boreas*], Pacific tree frog [*Hyla regilla*]) and waterfowl (e.g., mallard [*Anas platyrhynchos*], northern pintail [*Anas acuta*]). Although the wet meadow and tule-cattail communities are generally too wet to support small mammals, various amphibians and reptiles, and birds are often abundant in these communities. Many wildlife species use the annual grasses and forbs and perennial grasses and forbs communities for foraging, but some may require special habitat features, such as cliffs, caves, and ponds, for breeding, resting, and escape cover. Mammals typically found in the grasses and forbs communities include jackrabbit (*Lepus* sp.), ground squirrel (*Spermophilus* sp.), vole (*Microtus* sp.), badger (*Taxidea taxus*), and coyote (*Canis latrans*). Common birds known to breed in these habitats include horned lark (*Eremophila alpestris*) and meadow lark (*Sturnella neglecta*). Given the proximity of the non-native/ornamental grass, barren, and developed communities to the natural vegetation communities in the study area, many of the wildlife species using these other habitats may occasionally occur within the disturbed areas in the study area, especially those animals less sensitive to human-related disturbances.

The following wildlife species were observed in the study area during CAJA's field reconnaissance: American coot (*Fulica americana*), American kestrel (*Falco sparverius*), Clark's nutcracker (*Nucifraga columbiana*), common raven (*Corvus corax*), European starling (*Sturnus vulgaris*), pigeon (*Columba* sp.), red-tailed hawk (*Buteojamaicensis*), and red-wing blackbird (*Agelaius phoeniceus*). Evidence of mule deer (e.g., pellets) and jackrabbit (e.g., carcass) were also observed.

Special-Status Species

As discussed above in the Background and Methods section, the special-status plant and animal species evaluated for their potential to occur in the study area are listed below in Table IV.D-1. Those species rated as having a "medium" or "high" potential for occurrence or identified as "present" are discussed further below. The plants and animals rated as having "no" or "low" potential for occurrence are not discussed because these species are not likely to occur in the study area due to the fact that the general habitat and/or micro-habitat requirements for the species are not present, the species distribution does not include the study area, or the species was not detected during field surveys.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Plant Species	Status[1]					Habitat/Blooming Period	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CNPS	USFS		
Arabis cobrensis (Masonic rock cress)	--	--	G5/S1S2	2.3	S	Sandy soils in Great Basin scrub and pinyon and juniper woodland; 4,510-10,190 feet (ft) (1,375-3,105 meters (m)); June-July.	**Medium**. There is suitable habitat within the basin sagebrush community present in the study area.
Arabis pinzliae (Pinlz's rock cress)	--	--	G2/S1.3	1B.3	S	Alpine boulder and rock fields and scree or sandy soils in subalpine coniferous forest; 9,840-10,990 ft (3,000-3,350 m); July.	**No**. Although there is an occurrence recorded approximately 8 miles (mi) northwest (NW) of the Project site, there is no suitable habitat present in the study area. The study area does not support habitats this species typically inhabits and is below the elevation range occupied by this species.
Astragalus johannis-howellii (Long Valley milk-vetch)	--	R	G2/S2.2	1B.2	--	Sandy volcanic ash or pumice in Great Basin or sagebrush scrub; 6,690-8,300 ft (2,040-2,530 m); June-August.	**Low**. Although there is suitable scrub habitat present in the study area and the nearest occurrence is about 7 mi northeast (NE) of the Project site, sandy volcanic ash or pumice soils are not present. In addition, this species was not observed during 2005 and 2006 surveys conducted over the majority of the scrub habitat on the Project site.
Astragalus lemmonii (Lemmon's milk-vetch)	--	--	G3?/S2.2	1B.2	--	Great Basin scrub, meadows and seeps, and lake shore marshes and swamps; 4,200-7,220 ft (1,280-2,200 m); May-August.	**Medium**. There is suitable habitat within the wet meadow present in the study area. Additionally, there are two occurrences of recorded within approximately 12 mi of the Project site.
Astragalus lentiginosus var. *piscinensis* (Fish Slough milk-vetch)	T	--	G5T1/S1.1	1B.1	--	Alkaline playas, on mounds in alkali meadows with sparse vegetative cover; 3,710-4,270 ft (1,130-1,300 m); June-July.	**No**. The study area does not support habitats this species typically inhabits and is above the elevation range occupied by this species.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Plant Species	Status[1]					Habitat/Blooming Period	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CNPS	USFS		
Astragalus monoensis var. *monoensis* (Mono milk-vetch)	--	R	G2T2/S2	1B.2	S	Pumice flats with sparse vegetative cover in Great Basin scrub and upper montane coniferous forest; 3,890-11,010 ft (2,110-3,355 m); June-August.	**Low**. Although there is suitable scrub habitat present in the study area and the nearest occurrence is about 3 mi NE of the Project site, sparsely vegetated pumice flats are not present. In addition, this species was not observed during 2005 and 2006 surveys conducted over the majority of the scrub habitat on the Project site.
Botrychium ascendens (upswept moonwort)	--	--	G2G3/S1.3?	2.3	S	Mesic lower montane coniferous forest; 4,920-7,500 ft (1,500-2,285 m); July-August.	**No**. There is no suitable habitat present in the study area. The study area does not support habitats this species typically inhabits. Additionally, there are no occurrences recorded in the vicinity[3] of the Project site.
Botrychium crenulatum (scalloped moonwort)	--	--	G3/S2.2	2.2	S	Bogs and fens, lower montane coniferous forest, meadows and seeps, and freshwater marshes and swamps; moist meadows near creeks; 4,920-10,760 ft (1,500-3,280 m); June-September.	**Medium**. Although there are no occurrences recorded in the vicinity of the Project site, there is suitable habitat for this species within the wet meadow community in the study area.
Botrychium lunaria (common moonwort)	--	--	G5/S2?	2.3	--	Meadows and seeps, subalpine coniferous forest, and upper montane coniferous forest; 7,480-11,150 ft (2,280-3,400 m); August.	**Medium**. Although there are no occurrences recorded in the vicinity of the Project site, there is suitable habitat for this species within the wet meadow community in the study area.
Botrychium minganense (mingan moonwort)	--	--	G4/S1.2	2.2	S	Mesic lower montane coniferous forest and upper montane coniferous forest; creek banks in mixed conifer forest; 4,920-6,740 ft (1,500-2,055 m); July-September.	**No**. The study area does not support habitats this species typically inhabits.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Plant Species	Status[1]					Habitat/Blooming Period	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CNPS	USFS		
Carex scirpoidea ssp. *pseudoscirpoidea* (single-spiked sedge)	--	--	G5T5/S1.2	2.2	--	Mesic, often carbonate or limestone alpine boulder and rock fields, meadow and seeps, and subalpine coniferous forest; 10,500-12,140 ft (3,200-3,700 m); July-September.	**No**. The study area is below the elevation range occupied by this species.
Centarium namophilum (spring-loving centaury)	T	--	--	--	--	Moist soils in generally alkaline scrub in valley bottoms; <4,920 ft (<1500 m).	**No**. The study area does not support habitats this species typically inhabits.
Crepis runcinata ssp.*hallii* (Hall's meadow hawksbeard)	--	--	G5T3?/S2?	2.1	--	Mesic, alkaline soils in Mojavean desert scrub and pinyon juniper woodland; 4,100-6,490 ft (1,250-1,978 m); May-July.	**No**. Although there is an occurrence recorded approximately 9 mi NE of the Project site, the study area does not support habitats this species typically inhabits and is above the elevation range occupied by this species.
Draba breweri var. *cana* (hoary draba)	--	--	G5T5/S1.3	2.3	--	Carbonate soils in alpine boulder and rock fields, meadows and seeps, and subalpine coniferous forest; 9,840-11,500 ft (3,000-3,505 m); July.	**No**. Although there are several occurrences recorded within approximately 8 mi of the Project site, the study area is below the elevation range occupied by this species. Species known from only two occurrences.
Draba incrassata (Sweetwater Mountains draba)	--	--	G3/S3.3	1B.3	--	Rhyolitic talus in alpine boulder and rock fields; 8,200-13,010 ft (2,500-3,965 m); July-August.	**No**. Although there is an occurrence recorded approximately 9 mi southeast (SE) of the Project site, the study area does not support habitats this species typically inhabits.
Draba lonchocarpa var. *lonchocarpa* (spear-fruited draba)	--	--	G5T5/S1.3	2.3	--	Carbonate/limestone, scree in alpine boulder and rock fields; 9,840-10,810 ft (3,000-3,295 m); June-July.	**No**. Although there is an occurrence recorded approximately 7 mi SE of the Project site, the study area does not support habitats this species typically inhabits and is below the elevation range occupied by this species.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Plant Species	Status[1]					Habitat/Blooming Period	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CNPS	USFS		
Draba praealta (subalpine draba)	--	--	G5/S2.3	2.3	--	Mesic meadows and seeps; 8,200-11,200 ft (2,500-3,415 m); July-August.	**Medium**. There is suitable habitat within the wet meadow community present in the study area. Additionally, there is an occurrence recorded approximately 7 mi SE of the Project site.
Elymus scribneri (Scribner's wheat grass)	--	--	G5/S2?	2.3	--	Alpine boulder and rock fields, on rocky slopes; 9,510-13,780 ft (2,900-4,200 m); July-August.	**No**. Although there is an occurrence recorded approximately 8 mi SE of the Project site, the study area does not support habitats this species typically inhabits and is below the elevation range occupied by this species.
Epilobium howellii (subalpine fireweed)	--	--	G2/S2.3	1B.3	--	Meadows and seeps and mesic subalpine coniferous forest; wet meadows and mossy seeps; 6,560-8,860 ft (2,000-2,700 m); July-August.	**High**. There is suitable habitat within the wet meadow community present in the study area. Additionally, there are two occurrences recorded within approximately 5 mi of the Project site. The nearest occurrence is approximately 1 mi west (W) of the Project site.
Helodium blandowii (Blandow's bog-moss)	--	--	G5/S1.3	2.3	--	Meadows and seeps and damp soils in subalpine coniferous forest; 6,560-8,860 ft (2,000-2,700 m).	**Medium**. There is suitable habitat within the wet meadow community present in the study area. Additionally, there is an occurrence recorded approximately 14 mi SE of the Project site.
Hulsea brevifolia (short-leaved hulsea)	--	--	G3/S3.2	1B.2	S	Granitic or volcanic, gravelly or sandy soils in lower montane coniferous forest and upper montane coniferous forest; 4,920-10,500 ft (1,500-3,200 m); May-August.	**No**. Although there are two occurrences recorded within 6 mi of the Project site, there is no suitable habitat present in the study area. The study area does not support habitats this species typically inhabits.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Plant Species	Status[1]					Habitat/Blooming Period	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CNPS	USFS		
Hulsea vestita ssp. *inyoensis* (Inyo hulsea)	--	--	G5T2T3/S1.2	2.2	S	Rocky soils in chenopod scrub, Great Basin scrub, and pinyon and juniper woodland, in volcanic ash on steep slopes; 5,400-9,840 ft (1,645-3,000 m); April-June.	**Low**. Although suitable scrub habitat is present on the in the study area, no volcanic ash or rocky soils are present on steep slopes and there are no occurrences recorded in the vicinity of the Project site.
Ivesia kingii var. *kingii* (alkali ivesia)	--	--	G3T2Q/S2.2	1B.2	--	Mesic, alkaline clay soils in Great Basin scrub, meadows and seeps, and playas; 3,940-6,990 ft (1,200-2,130 m); May-August.	**No**. Although there are several occurrences recorded within 11 mi of the Project site, there is no suitable habitat present in the study area.
Kobresia bellardii (seep kobresia)	--	--	G5/S1.3	2.3	--	Alpine boulder and rock fields, meadows and seeps, and subalpine coniferous forest; 9,690-10,600 ft (2,955-3,230 m); August.	**No**. Although there is an occurrence recorded approximately 5 mi SE of the Project site, the study area does not support habitats this species typically inhabits.
Lupinus duranii (Mono Lake lupine)	--	--	G2/S2.2	1B.2	--	Volcanic pumice, gravelly soils in Great Basin scrub, subalpine coniferous forest, and upper montane coniferous forest; 6,560-9,840 ft (2,000-3,000 m); May-August.	**Low**. Although there is suitable scrub habitat in the study area and the nearest occurrence of this species is approximately 1 mi northwest (NW) of the Project site, volcanic pumice or gravel soils are not present. In addition, this species was not observed during 2005 and 2006 surveys conducted over the majority of the scrub habitat on the Project site.
Lupinus lepidus var. *culbertsonii* (Hockett Meadows lupine)	--	--	G3?T1/S1.3	1B.3	--	Meadows and seeps and mesic rocky soils in upper montane coniferous forest; 8,000-9,840 ft (2,440-3,000 m); July-August.	**Medium**. There is suitable habitat within wet meadow community present in the study area.
Pedicularis crenulata (scalloped-leaved lousewort)	--	--	G4/S1.2	2.2	--	Mesic meadows and seep; 6,890-7,550 ft (2,100-2,300 m); June-July.	**Medium**. Although there are no occurrences recorded in the vicinity of the Project site, there is suitable habitat within the wet meadow community present in the study area.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Plant Species	Status[1]					Habitat/Blooming Period	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CNPS	USFS		
Phacelia inyoensis (Inyo phacelia)	--	--	G3/S2.3	1B.2	--	Alkaline soils in meadows and seeps; 3,000-10,500 ft (915-3,200 m); April-August.	**No**. Although there are two occurrences recorded within 2 mi of the Project site, there is no suitable habitat present in the study area.
Potamogeton filiformis (slender-leaved pondweed)	--	--	G5/S1S2	2.2	--	Assorted shallow freshwater marshes and swamps; 980-7,050 ft (300-2,150 m); May-July.	**No**. Although there is an occurrence recorded in the vicinity of the Project site, there is no suitable habitat present in the study area.
Potamogeton robbinsii (Robbins's pondweed)	--	--	G5/SG2.3	2.3	--	Deep water, lakes, marshes and swamps; 5,200-10,830 ft (1,585-3,300 m); July-August.	**Medium**. There is suitable habitat within the open water ponds present in the study area. Additionally, there is an occurrence recorded approximately 5 mi W of the Project site. Only a portion of the ponds in the study area were surveyed in 2005 and 2006.
Salix brachycarpa ssp.*brachycarpa* (short-fruited willow)	--	--	G5T5/S1.3	2.3	--	Carbonate alpine dwarf scrub, meadows and seeps, and subalpine coniferous forest; 9,840-11,490 ft (3,000-3,500 m); June-July.	**No**. Although there are occurrences recorded within 9 mi of the Project site, the study area is below the elevation range occupied by this species.
Salix nivalis (snow willow)	--	--	G5/S1.3	2.3	--	Alpine dwarf scrub; 10,170-11,490 ft (3,100-3,500 m); July-August.	**No**. There is no suitable habitat present in the study area. The study area does not support habitats this species typically inhabits and is below the elevation range occupied by this species.
Scirpus pumilus (dwarf bulrush)	--	--	G5/S1.2	2.2	--	Riverbanks, carbonate soils in bogs and fens, marshes and swamps, and riparian scrub; 9,430-10,660 ft (2,875-3,250 m); August.	**No**. Although, there are two occurrences recorded within approximately 9 mi of the Project site, the study area is below the elevation range occupied by this species.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Plant Species	Status[1]					Habitat/Blooming Period	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CNPS	USFS		
Sedum pinetorum (Pine City sedum)	--	--	GUGH/SH	3	--	Rocky, open forest; 8,690 ft (2,650 m); July.	**No**. There is no suitable habitat present in the study area.
Sphaeromeria potentilloides var.*nitrophila* (alkali tansy-sage)	--	--	G5T4/S2.2	2.2	--	Usually alkaline meadows and seeps and playas; 6,890-7,870 ft (2,100-2,400 m); June-July.	**No**. Although, there are two occurrences recorded within approximately 13 mi of the Project site, there is no suitable habitat present in the study area.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Animal Species	Status[1]					Habitat	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CDFG	USFS		
Invertebrates							
Ambrysus funebris (Nevares Spring naucorid bug)	C	--	G1/S1	--	--	Endemic to the Travertine-Nevares Springs Complex within the boundary of Death Valley National Park. Prefers stream riffles that are swift enough to keep sand and silt from accumulating, but not so fast that coarse, gravelly substrates are removed. Water velocity and substrate size play a significant role in the presence or absence of the naucorid.	**No**. The Project site is outside of the naucorid's known distribution. A hundred percent of the naucorid's distribution is confined to federal lands that are administered by the National Park Service, Death Valley National Park. Additionally, the flightless nature of the species suggests it is unable to disperse to, or colonize, new aquatic habitats.
Pyrgulopsis owensensis (Owens Valley springsnail)	--	--	G1G2/S1S2	--	S	Inhabit springs and short sections of spring brook located below 2,286 m (7,500 ft) with good water quality, a sand or gravel substrate and aquatic vegetation where water velocities are moderate.	**No**. There is no suitable habitat present in the study area. The study area is above the elevation range occupied by this species. Additionally, there are no occurrences recorded in the vicinity of the Project site.
Pyrgulopsis wongi (Wong's springsnail)	--	--	G1G2/S1S2	--	S	Inhabit springs and short sections of spring brook located below 2,286 m (7,500 ft) with good water quality, a	**No**. There is no suitable habitat present in the study area. The study area is above the elevation range

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Animal Species	Status[1]					Habitat	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CDFG	USFS		
						sand or gravel substrate and aquatic vegetation where water velocities are moderate.	occupied by this species. Additionally, there are no occurrences recorded in the vicinity of the Project site.
Fish							
Catostomus fumeiventris (Owens sucker)	--	--	G3/S3	CSC	--	Widely distributed throughout Owens Valley, including Mammoth and Hot creeks. Most abundant in sections with long runs and few riffles, and a substrate consisting mostly of fine material, with lesser amounts of gravel and rubble.	**Low**. Although this species is known to occur in Mammoth Creek, it is found in the lower reaches of the creek, east of Highway 395 to the confluence of Mammoth Creek and Hot Creek.[4]
Gila bicolor snyderi (Owen's tui chub)	E	E	G4T1/S1	--	--	Found in three known locations in Owens River drainage, including Hot Creek headsprings and Little Hot Creek. Primary habitat requirements include high quality, cool water with adequate cover in the form of rocks, undercut banks, or aquatic vegetation, and a sufficient insect food base.	**Low**. Although the lower reaches of Mammoth Creek supports an abundance of tui chub, these fish are believed to represent a hybridized population of Owens tui chub and Lahontan tui chub. Because of the introduction of Lahontan tui chubs into the Owens Valley, the only pure populations of Owens tui chub are restricted to locations where they remain isolated from interaction with Lahontan tui chubs or hybridized populations. The nearest pure population of Owen tui chub occur at the Hot Creek headsprings immediately upstream of the Hot Creek Fish Hatchery and at Little Hot Creek Pond.
Oncorhynchus clarkii henshawi (Lahontan cutthroat trout)	T	--	G4T3/S2	--	--	Inhabit lakes and streams and require spawning and nursery habitat characterized by cool water, pools in close proximity to cover and velocity	**No**. Lahontan cutthroat trout are not established in Mammoth Creek.[4]

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Animal Species	Status[1]					Habitat	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CDFG	USFS		
						breaks, well vegetated and stable stream banks, and relatively silt free rocky substrate in riffle-run areas.	
Oncorhynchus clarkii seleniris (Paiute cutthroat trout)	T	--	G4T1T2/S1S2	CSC	--	Requires cool, well-oxygenated waters. Prefer stream pool habitat in low gradient meadows with undercut or overhanging banks and abundant riparian vegetation.	**No**. Paiute cutthroat trout are not established in Mammoth Creek.[4]
Rhinichthys osculus ssp. *2*[5] (Owens speckled dace)	--	--	G5T1T2Q/S1S2	CSC	--	Habitat generalist, able to occupy habitats as diverse as thermal springs, headwater, streams, and large rivers.	**Low**. This species is not likely to be found within the reach of Mammoth Creek in the study area because of the presence of non-native fish species (e.g., brown trout (*Salmo trutta*)) and the remaining populations are small and isolated. The current distribution of this species is restricted to several isolated locations in Owens Valley and Long Valley, including Whitmore Hot Springs and Little Alkali Lake.
Amphibians/Reptiles							
Bufo canorus (Yosemite toad)	C	--	G1G2/S1S2	CSC	S	Frequents wet mountain meadows and forest borders in elevations ranging from 6,400-11,318 ft (1,950-3,450 m). mostly above 9,000 ft (2,740 m). Obtains shelter in rodent burrows as well as in dense vegetation. Breeds in shallow edges of snow melt pools and ponds or along margins of lakes and slow-moving streams.	**Medium**. There is suitable habitat within the vegetation communities and waters present in the study area. Additionally, there are several occurrences recorded within approximately 12 mi of the Project site. The nearest occurrence is approximately 2 mi SW of the Project site.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Animal Species	Status[1]					Habitat	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CDFG	USFS		
Rana muscosa (mountain yellow-legged frog)	E[6]	--	G2/S2	CSC	S	Sunny riverbanks, meadow streams, isolated pools, and lake borders within the Sierra Nevada in elevations ranging from 600-12,000 ft (1,800-3,600 m). Seems to prefer sloping banks with rocks or vegetation to water's edge. Sierran frogs are most abundant in high elevation lakes and slow-moving portion of streams. Wintering sites include areas near shore under ledges and in deep underwater crevices.	**Low**. There is suitable habitat within the vegetation communities and waters present in the study area. Additionally, there are several occurrences of recorded within approximately 19 mi of the Project site. The nearest occurrence is approximately 6 mi SE of the Project site. However, waters in the study area, specifically Mammoth Creek, support a well-established population of brown trout, which are known to have a detrimental impact on yellow-legged frog populations.
Birds							
Accipiter gentilis (northern goshawk) nesting	--	--	G5/S3	CSC	S	Nest and forage in a variety of habitats including deciduous, coniferous, and mixed forests. Has a complexity of habitat needs in the breeding season, which vary among forest types and regions. Typically nests in mature or old-growth forests, and generally selects larger tracts of forest over smaller tracts. Forages in both heavily forested and relatively open habitats.	**Low**. Although there are several occurrences recorded within approximately 17 mi of the Project site, typical nesting habitat is not present on the site. The nearest occurrence is approximately 4 mi south (S) of the Project site. Goshawks may occasionally forage in the study area.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Animal Species	Status[1]					Habitat	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CDFG	USFS		
Aquila chrysaetos (golden eagle) nesting and foraging	--	--	G5/S3	CSC, FP	--	Breeds in open and semi-open habitats (e.g., tundra, shrublands, grasslands, woodland-brushlands, and coniferous forest). Also, in farmlands and riparian. Nests on rock ledge of cliffs, but also in large trees. Pair may have several alternate nests; may use the same nest in consecutive years or shift to alternate nest used in different years. Typically forages in open habitats (e.g., grassland or steppe-like).	**Low**. There is marginal nesting and foraging habitat present in the study area. However, there are no known occurrences in the vicinity of the Project site and the proximity to human-related activities likely precludes golden eagles from nesting in the study area.
Buteo swainsoni (Swainson's hawk) nesting	--	T	G5/S2	--	S	Require large, open grasslands with abundant prey in association with suitable nest trees. Suitable foraging habitat include native grasslands or lightly grazed pastures, alfalfa and other hay crops, certain grain and row croplands, sparse shrublands, and small, open woodlands. Suitable nest sites may be found in mature riparian forest, lone trees, or groves of oaks, other trees in agricultural fields, and mature roadside trees.	**Low**. Although there is suitable foraging habitat present in the study area, Swainson's hawk is not expected to nest in the study area. In the Great Basin, nests are usually in junipers[7]. There is an occurrence recorded within approximately 18 mi of the Project site.
Centrocercus urophasianus (greater sage-grouse) nesting and leks	--	--	G4/S3	CSC	S	Adopted to a mosaic of sagebrush habitats including relatively tall sagebrush, relatively low sagebrush, forb-rich mosaics of low and tall sagebrush, riparian meadows, steppe dominated by native grasses and forbs, scrub willow and sagebrush savannas with juniper (*Juniperus* spp.), ponderosa pine (*Pinus ponderosa*), or quaking aspen	**Low**. Although there is suitable habitat present in the study area and there are occurrences recorded in the vicinity of the Project site, no grouse or leks have been documented on the site. There are several leks near the site. Lek 7, as designated by the Bureau of Land Management (BLM) is the closest, located 1.25 mi north of the Mammoth Yosemite Airport, and

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Animal Species	Status[1]					Habitat	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CDFG	USFS		
						(*Populus tremuloides*). Leks placed on sites surrounded by potential nesting habitat. Nest habitat, usually dominated by big sagebrush (*Artemisia tridentata* ssp. *tridentate* and *A.* ssp. *wyomingensis*).	north of Hot Creek. This lek has been inactive in the recent past. There are six other known leks on BLM-administrated lands situated between 2.5 and 4.5 mi form the airport. Other leks are located greater than 7 mi from the Project site.
Circus cyaneus (northern harrier) nesting	--	--	G5S3	CSC	--	Marshes, meadows, grasslands, and cultivated fields. Perches on ground or on stumps or posts. Nests on the ground, commonly near low shrubs, in tall weeds or reeds, sometimes in bog; or on top of low bush above water, or on knoll of dry ground, or on higher shrubby ground near water, or on dry marsh vegetation.	**Low**. Although there is suitable nesting and foraging habitat present in the study area and harriers have been observed in the vicinity of the Project site, harriers are not expected to nest in the study area. The proximity to human-related activities and the elevation of the site likely precludes harriers from nesting in the study area.
Coccyzus americanus occidentalis (western yellow-billed cuckoo) nesting	C	E	G5T2/S1	--	S	Prefers open woodland with clearings and low, dense, scrubby vegetation; often associated with watercourses. Nest placed in willows (*Salix* sp.), but cottonwood (*Populus* sp.) used extensively for foraging.	**No**. The Project site is outside of the known breeding distribution of the western yellow-billed cuckoo. Likely found only along the upper Sacramento Valley portion of the Sacramento River, the Feather River in Sutter County, the south fork of the Kern River in Kern County, and along the Santa Ana, Amargosa, and lower Colorado rivers.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Animal Species	Status[1]					Habitat	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CDFG	USFS		
Empidonax traillii (willow flycatcher) nesting	--	E[8]	G5/S1S2	--	S	In general, prefers moist, shrubby areas, often with standing or running water; e.g., in California restricted to thickets of willows, whether along streams in broad valleys, in canyon bottoms, around mountain-side seepages, or at the margins of ponds and lakes.	**Medium**. There is suitable nesting and foraging habitat within the willow-alder riparian community present in the study area. Additionally, there is an occurrence recorded approximately 11 mi NW of the Project site.
Falco mexicanus (prairie falcon) nesting	--	--	G5/S3	CSC	--	Primarily open habitats, especially in mountainous areas, steppe, plains or prairies. Typically nests in potholes or well-sheltered ledges on rocky cliffs or steep earth embankments, 10 to more than 100 m above the base. May nest in man-made excavations on otherwise unsuitable cliffs. Vertical cliffs with rock structure overhanging the site are preferred.	**Low**. There is no suitable nesting habitat present in the study area. However, there is suitable foraging habitat present. Prairie falcon may occasionally forage within the low vegetation communities in the study area. There are no occurrences recorded in the vicinity of the Project site.
Haliaeetus leucocephalus (bald eagle) nesting and wintering	PD T	E	G4/S2	FP	--	In winter may be found throughout most of California at lakes, reservoirs, rivers, and some rangelands and coastal wetlands. Breeding habitats are mainly in mountain and foothill forest and woodlands near reservoirs, lakes, and rivers. Most breeding territories are in northern California, but the eagles also nest in scattered locations in the central and southern Sierra Nevada mountains and foothills, in several locations from the central coast range to inland southern California, and on Santa Catalina Island.	**Low**. Although there are known occurrences of wintering bald eagles in the vicinity of the Project site, the study area does not support suitable breeding habitat and suitable foraging habitat is very limited. Wintering eagles are known to forage along Convict Creek, Crowley Lake, Hot Creek, Upper Owens River, Hot Creek Hatchery, Lake Mary, Twin Lakes, and the alkali ponds and flats east of the Mammoth Yosemite Airport.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Animal Species	Status[1]					Habitat	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CDFG	USFS		
Riparia riparia (bank swallow) nesting	--	T	G5/S2S3	--	--	Nests in erodible soils on vertical or near-vertical banks and bluffs in lowland areas dominated by rivers, streams, lakes, and oceans. Foraging habitat surrounding nesting colony include wetlands, open water, grasslands, riparian woodlands, agricultural areas, shrublands, and occasionally upland woodlands.	**Low**. There is no suitable nesting habitat present in the study area. There is however suitable foraging habitat within the vegetation communities present in the study area. Bank swallows have been observed in an abandoned gravel quarry north of the Mammoth Yosemite Airport.
Strix nebulosa (great gray owl) nesting	E	--	G5/S1	--	S	Dense deciduous or coniferous forest adjacent to montane meadows and other openings. Favors abandoned nests of other birds of preys, but will nest on the tops of broken trees or on artificial platforms.	**Low**. Although there is no suitable nesting habitat present in the study area, there is suitable foraging habitat within the wet meadow community present in the study area. Additionally, there is an occurrence were the general area mapped for the record encompasses the Project site.
Strix occidentalis occidentalis (California spotted owl)	--	--	G3T3/S3	CSC	S	At low elevations (sea level to 1,000 m (3,280 ft), occupies habitats dominated by hardwoods, primarily oaks. At high elevations, owl habitats are increasingly dominated by conifers until, at the highest elevations, hardwoods are nearly or completely lacking. Nesting and roosting habitat are generally complex in structure (many trees in different diameter classes) with high canopy closure. A critical element of this complex forest structure is the presence of large trees (>90 cm diameter at breast height).	**No**. There is no suitable habitat present in the study area. The study area is above the elevation range occupied by spotted owls.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Animal Species	Status[1]					Habitat	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CDFG	USFS		
Mammals							
Aplodontia rufa californica (Sierra Nevada mountain beaver)	--	--	G5T3T4/S3?	CSC	--	Dense growth of small deciduous trees and shrubs and soft soil for burrowing along streams or wet meadows.	**High**. There is suitable habitat within the willow-alder riparian community present in the study area. Additionally, this species is known to inhabit the riparian habitat along Mammoth Creek.[9]
Corynorhinus townsendii (Townsend's big-eared bat)	--	--	G4/S2S3	CSC	S	Reported in a wide variety of habitat types ranging from sea level to 3,300 m (9,840 ft). Habitat associations include: coniferous forests, mixed meso-phytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Maternity and hibernation colonies typically are in caves and mine tunnels. Uses caves and buildings for night roost.	**Low**. Although the bat's known distribution includes the Project site, there are no occurrences recorded in the vicinity of the site. Additionally, the study area lacks typical roosting habitat, which the bat's distribution is strongly correlated to.
Gulo gulo (California wolverine)	--	--	G4/S2	FP	S	Alpine and arctic tundra, boreal and mountain forest (primarily coniferous). Usually in areas with snow on the ground in winter. Riparian areas may be important winter habitat. May disperse through atypical habitat. When inactive, occupies den in cave, rock crevice, under fallen tree, in thicket, or similar site.	**Low**. Although wolverine could disperse through the study area during the winter, the study area does not support the typical habitat used by the species. There is a record of tracks observed approximately 6 mi SE of the Project site.
Lasiurus blossevillii (western red bat)	--	--	G5/S2S3	--	S	Closely associated with cottonwoods (*Populus* sp.) in riparian areas at elevations below 1,980 m (6,500 ft).	**Low**. Although the study area is above the elevation range occupied western red bat, suitable habitat is present in the study area.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Animal Species	Status[1]					Habitat	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CDFG	USFS		
Lupus townsendii townsendii (western white-tailed jackrabbit)	--	--	G5T3/S3?	CSC	--	Sagebrush, subalpine conifer, juniper, alpine dwarf-scrub, and perennial grassland. Also, use low sagebrush, wet meadow, and early successional stages of various coniferous communities. Within these communities prefers open areas with scattered scrubs and exposed flat-topped hills with stands of trees, brush, and herbaceous understory. Rests by day usually in shallow depression at base of bush or beside or in a cavity in the snow.	**High**. There is suitable habitat present in the study area. Additionally, there are two occurrences recorded within approximately 5 mi of the Project site.
Martes americana sierrae (American marten)	--	--	G5T3T4/S3S4	--	S	Mature, dense conifer forest or mixed conifer-hardwood forests with woody debris on the forest floor.	**No**. Although there are several occurrences recorded within approximately 7 mi of the Project site, there is no suitable habitat present in the study area.
Martes pennanti (pacifica) DPS (Pacific fisher)	C[10]	--	G5T3T4Q/S2S3	CSC	S	Use large areas of primarily coniferous forests with fairly dense canopies and large trees, snags, and down logs.	**No**. Although there are two occurrences recorded within 8 mi of the Project site, there is no suitable habitat present in the study area.
Ovis canadensis californiana (California bighorn sheep)	E	E	G4T1/S1	FP	--	Use habitats ranging from the highest elevations along the crest of the Sierra Nevada (13,120+ft (4,000+m)) to winter ranges at the eastern base of the range as low as 1,450 m (4,760 ft). These habitats range from Great Basin sagebrush scrub to alpine. Within this range, primary elements of preferred habitats are visual openness and close proximity to steep rocky escape terrain.	**No**. Although populations of bighorn sheep occur in the vicinity of the Project site, the primary elements of the species preferred habitats are not present.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Animal Species	Status[1]					Habitat	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CDFG	USFS		
Sorex lyelli (Mount Lyell shrew)	--	--	G2G3/S2S3	CSC	--	Primarily found in wetland communities, near streams, in grassy areas, under willows, and in sagebrush steppe communities in elevations ranging from 6,900-10,350 ft (2,100-3,155 m).	**High**. There is suitable habitat present in the study area. Additionally, there are two occurrences recorded within 19 mi the Project site. The general area of one of these occurrences encompasses the Project site.
Taxidea taxus American badger	--	--	G5S4	CSC	--	Prefers open areas and may also frequent brushlands with little groundcover. When inactive, occupies underground burrow.	**High**. There is suitable habitat present in the study area and badger are known to occur in the vicinity of the Project site.[9]
Vulpes vulpes necator (Sierra Nevada red fox)	--	T	G5T3/S1	--	S	Various habitats in alpine and subalpine zones; preferred habitat apparently red fir and lodgepole pine forests and alpine fell-fields; may hunt in forest openings, meadows, and barren rocky areas. Dens are likely to be in rock slides. Occurs above 4,000 ft (1,220 m), usually above 7,000 ft (2,130 m).	**Low**. Although there is an occurrence recorded approximately 7 mi north (N) of the Project site and suitable foraging habitat is present in the study area, red fox tend to inhabit remote areas where chance encounters with humans are uncommon. Red fox could occasionally disperse through the study area.

[1] *Status Codes:*
ESA: Endangered Species Act of 1972, as amended
E Federally listed as Endangered
T Federally listed as Threatened
PD Federally proposed for delisting
C Federal candidate species (former Category 1 candidates)
-- No designation.
CESA: California Endangered Species Act
R State listed as Rare
E State listed as Endangered
T State listed as Threatened
-- No designation
CNDDB: California Natural Diversity Database
G,T,S-rank CNDDB element ranking. The global rank (G-rank) is a reflection of the overall condition of an element throughout its global range, with G1 being the most rare and G5 the least rare. Subspecies receive a T-rank attached to the G-rank. The state rank (S-rank) is a reflection of the overall condition of an element throughout California, sometimes with a threat designation attached, with S1being the most rare and S5 the least rare.

Table IV.D-1.
Special Status Plant and Animal Species Evaluated for Potential to Occur in the Study Area

Animal Species	Status[1]					Habitat	Potential for Occurrence[2]
	FESA	CESA	CNDDB	CDFG	USFS		

California Native Plant Society (CNPS):
1B Plants listed as rare, threatened, or endangered in California and elsewhere
2 Plants rare, threatened, or endangered in California, but more common elsewhere
3 Plants about which more information is needed
-- No designation
Recently, CNPS added a decimal threat rank to the List rank to parallel that used by the CNDDB. This extension replaces the E (Endangerment) value from the R-E-D Code. CNPS ranks therefore read like this: 1B.1, 1B.2, etc. New threat code extensions and their meanings are as follows:

.1 – Seriously endangered in California (over 80% of occurrences threatened / high degree of immediacy of threat)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)
CDFG: California Department of Fish and Game
CSC species of special concern
FP fully protected
-- No designation
USFS: USDA Forest Service, Pacific Southwest Region
S Sensitive Species
-- No designation
[2] The potential for occurrence is based on occurrences recorded in the CNDDB, knowledge of species requirements, and September 2006 field reconnaissance.
[3] Within Old Mammoth (434B) U.S. Geological Service (USGS) 7.5-Minute Quadrangle and the eight surrounding USGS quadrangles.
[4] Parmenter, Steve (California Department of Fish and Game). 2006. Phone conversation on December 1, 2006.
[5] Current taxonomy includes the Benton Valley speckled dance (formerly ssp. 4) with the Owens speckled dace.
[6] Federal listing refers to populations in the San Gabriel, San Jacinto & San Bernardino Mountains only.
[7] NatureServe. 2006. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.1. NatureServe, Arlington, Virginia. Available at http://www.natureserve.org/explorer. (Accessed: December 6, 2006).
[8] State listing includes all subspecies.
[9] Steele, D. T. 1989. An ecological survey of endemic mountain beavers (Aplodontia rufa) in California, 1979-83. California Department of Fish and Game, Wildlife Management Division, Admin. Rep. No. 89-1. 39pp. + appends.
[10] Candidate status refers to the distinct population segment in Washington, Oregon, and California.
Sources:
California Natural Diversity Database. Biogeographic Data Branch, Department of Fish and Game. November 20, 2006.
California Native Plant Society. November 6, 2006. Inventory of rare and endangered plants of California. California Native Plant Society, Sacramento. Accessed November 6, 2006. Available from http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi
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Town of Mammoth Lakes. 2005. Revised Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update.
U.S. Fish and Wildlife Service. November 6, 2006. Listed, Proposed, and Candidate Species which May Occur in Mono County. Ventura (CA): Ventura Fish and Wildlife Office. Accessed November 6, 2006. Available from http://www.fws.gov/ventura/esprograms/listing%5Fch/

Plants

Based upon a review of the resources and databases available, 35 special-status plants have been documented in the vicinity of the Project site. Of these, 21 species have "no" potential, four have "low" potential, nine have "medium" potential, and one has "high" potential for occurrence in the study area. There are no specials-status plants identified as "present" in the study area. The nine species with "medium" potential for occurrence are discussed in more detail below, including Masonic rock cress (*Arabis cobrensis*), Lemmon's milk-vetch (*Astragalus lemmonii*), scalloped moonwort (*Botrychium crenulatum*), common moonwort (*Botrychium lunaria*), subalpine draba (*Draba praealta*), Blandow's bog-moss (*Helodium blandowii*), Hockett Meadow lupine (*Lupinus lepidus* var. *culbertsonii*), scalloped-leaved lousewort (*Pedicularis crenulata*), and Robbin's pondweed (*Potamogeton robbinsii*). Subalpine fireweed (*Epilobium howellii*) has "high" potential for occurrence in the study area and is also discussed below. The majority of the special-status plant species listed above have the potential for occurrence within the basin sagebrush and wet meadow communities in the study area.

Medium Potential

Masonic Rock Cress

Masonic rock cress is a CNPS List 2.3 species and is designated sensitive by the USFS, Region 5. It is a perennial herb of the mustard family (Brassicaceae) that occurs on sandy soils within Great Basin scrub and pinyon and juniper woodlands in elevations ranging from 4,510 to 10,190 feet (1,375 to 3,105 meters). In California, Masonic rock cress has been found in Mono and Modoc counties. It also occurs within counties in Nevada and Oregon. The blooming season for Masonic rock cress extends from June through July. Although there are no occurrences of Masonic rock cress recorded in the vicinity of the Project site (i.e., within the Old Mammoth (434B) USGS 7.5-Minute Quadrangle or the eight surrounding USGS quadrangles), the basin sagebrush community in the development area provides potential habitat for this species. The basin sagebrush community in the southern portion of the development area was surveyed, but the surveys were not conducted at the appropriate time of year when Masonic rock cress is both evident and identifiable. Additionally, the basin sagebrush community in the northern portion of the development area was not surveyed. For these reasons, Masonic rock cress has a medium potential for occurrence within the development area in the basin sagebrush vegetation community.

Lemmon's Milk-Vetch

Lemmon's milk-vetch is a CNPS List 1B.2 species. It is a perennial herb of the legume family that occurs within Great Basin scrub, meadows and seeps, and lake shore marshes and swamps in elevations ranging from 4,200 to 7,220 ft (1,280 to 2,200 m). In California, Lemmon's milk-vetch has been found in Lassen, Mono, Modoc, Plumas, and Sierra counties. It also occurs within counties in Nevada and Oregon. The blooming season for Lemmon's milk-vetch extends from May through August. Although the site is slightly above the elevation range this species typically occupies, the wet meadow community within the area designated as open space in the study area provides potential habitat for Lemmon's milk-vetch; the basin sagebrush community in the study area lacks suitable microhabitat for Lemmon's milk-

vetch (i.e., mesic soil conditions). Additionally, there are two occurrences of Lemmon's milk-vetch recorded within approximately 12 miles of the Project site. For these reasons, this species has a medium potential for occurrence in the open space area of the study area.

Scalloped Moonwort

Scalloped moonwort is a CNPS List 2.2 species and designated sensitive by the USFS, Region 5. It is a rhizomatous herb of the Adder's-tongue family (Ophioglossaceae) that occurs within bogs and fens, lower montane coniferous forest, meadows and seeps, freshwater marshes and swamps, and moist meadows near creeks in elevations ranging from 4,920 to 10,760 feet (1,500 to 3,280 meters). In California, scalloped moonwort has been found in Butte, Colusa, Lake, Los Angeles, Mono, Modoc, Placer, Plumas, San Bernardino, Shasta, Tehama, and Tulare counties. It also occurs within counties in Arizona, Idaho, Nevada, Oregon, Utah, Washington, and Wyoming. The blooming season for scalloped moonwort extends from June through September. Although there are no occurrences of scalloped moonwort recorded in the vicinity of the Project site, the wet meadow community within the area designated as open space in the study area provides potential habitat for this species. The wet meadow community was not surveyed for scalloped moonwort. For this reason, this species has a medium potential for occurrence in the open space area of the study area.

Common Moonwort

Common moonwort is a CNPS List 2.3pecies. It is a rhizomatous herb of the Adder's-tongue family that occurs within meadows and seeps, subalpine coniferous forest, and upper montane coniferous forest in elevations ranging from 7,480 to 11,150 feet (2,280 to 3,400 meters). In California, common moonwort is found in Mono, Modoc, Nevada, Sierra, Tulare, Tuolumne counties. It also occurs within counties in Arizona, Idaho, New Mexico, Nevada, Oregon, Utah, Washington, and other states. The blooming season for common moonwort is August. Although there are no occurrences of this species recorded in the vicinity of the Project site, the wet meadow community within the area designated as open space in the study area provides potential habitat for this species. This vegetation community was not surveyed. For this reason, common moonwort has a medium potential for occurrence in the open space area of the study area.

Subalpine Draba

Subalpine draba is a CNPS List 2.3 species. It is a perennial herb of the mustard family that occurs within mesic meadows and seeps in elevations ranging from 8,200 to 11,200 feet (2,500 to 3,415 meters). In California, subalpine draba is found in Fresno, Inyo, Mono, and Tuolumne counties. It also occurs within counties in Nevada, Oregon, Washington, Wyoming, and other states. The blooming season for subalpine draba extends from July through August. The wet meadow community within the area designated as open space in the study area provides potential habitat for this species. Additionally, there is an occurrence recorded approximately 7 miles southeast of the Project site. For these reasons, subalpine draba has a medium potential for occurrence in the open space area of the study area.

Blandow's Bog-Moss

Blandow's bog-moss is a CNPS List 2.3 species. It is a moss that occurs within meadows and seeps and on damp soils within subalpine coniferous forest in elevations ranging from 6,560 to 8,860 feet (2,000 to 2,700 meters). In California, Blandow's bog-moss is only found in Fresno and Mono counties. However, it also occurs within counties in Nevada, Oregon, Utah, Washington, and other states. The wet meadow community within the area designated as open space in the study area provides potential habitat for this species. Additionally, there is an occurrence of Blandow's bog-moss recorded approximately 14 miles southeast of the Project site. For these reasons, Blandow's bog-moss has a medium potential for occurrence in the open space area of the study area.

Hockett Meadow Lupine

Hockett Meadow lupine is a CNPS List 1B.3 species. It is a perennial herb of the legume family that occurs within meadows and seeps and on mesic rocky soils within upper montane coniferous forest in elevations ranging from 8,000 to 9,840 feet (2,440 to 3,000 meters). Hockett Meadow lupine is only found in Fresno, Mono, and Tulare counties in California. The blooming season for Hockett Meadow lupine extends from July through August. Although there are no occurrences of this species recorded in the vicinity of the Project site and the site is slightly above the elevation range of Hockett Meadow lupine, the wet meadow community within the area designated as open space in the study area provides potential habitat for Hockett Meadow lupine. For this reason, Hockett Meadow lupine has a medium potential for occurrence in the open space area of the study area.

Scalloped-Leaved Lousewort

Scalloped-leaved lousewort is a CNPS List 2.2 species. It is a perennial herb of the figwort family (Scrophulariaceae) that occurs in mesic meadows and seeps in elevations ranging from 6,890 to 7,550 feet (2,100 to 2,300 meters). In California, scalloped-leaved lousewort is only found in Mono County. However, it also occurs within counties in Nevada and Wyoming. The blooming season for scalloped-leaved lousewort extends from June through July. Although there are no occurrences of this species recorded in the vicinity of the Project site and the site is slightly above the elevation range scalloped-leaved louse typically occupies, the wet meadow community within the area designated as open space in the study area provides potential habitat for this species. For this reason, scalloped-leaved louse has a medium potential for occurrence in the open space area of the study area.

Robbin's Pondweed

Robbin's pondweed is a CNPS List 2.3 species. It is a rhizomatous aquatic herb of the pondweed family (Potamogetonaceae) that occurs within deep water, lakes marshes, and swamps in elevations ranging from 5,200 to 10,830 feet (1,585 to 3,300 meters). In California, Robbin's pondweed is found in Alpine, Fresno, Inyo, Lassen, Madera, Mono, Nevada, Sierra, Siskiyou, and Tuolumne counties. It also occurs within counties in Idaho, Oregon, Utah, Washington, and other states. The blooming season for Robbin's

pondweed extends from July through August. The several ponds near Mammoth Creek, as well as the golf course ponds in the study area provide potential habitat for this species. Additionally, there is an occurrence of Robbin's pondweed recorded approximately five miles west of the Project site. Although surveys were conducted at the proper time of the year for Robbin's pondweed, only the ponds in the southern portion of the study area were surveyed (i.e., the golf course ponds). For this reason, Robbin's pondweed has a medium potential for occurrence within the ponds near Mammoth Creek. However, it should be noted that these ponds are within the area designated as open space in the study area.

High Potential

Subalpine Fireweed

Subalpine fireweed is a CNPS List 1B.3 species. It is stoloniferous herb of the evening primrose family (Onagraceae) that occurs within meadows and seeps and mesic subalpine coniferous forest in elevations ranging from 6,560 to 8,860 feet (2,000 to 2,700 meters). Subalpine fireweed is only found in Fresno, Madera, Mono, Nevada, and Sierra counties in California. The blooming season for subalpine fireweed extends from July through August. Although this species is only known from approximately six occurrences, there are two occurrences recorded within five miles of the Project site. There nearest occurrence is approximately one mile west of the site. Additionally, the wet meadow community within the area designated as open space in the study area provides potential habitat for this species. For these reasons, subalpine fireweed has a high potential for occurrence in the open space area of the study area.

Animals

Thirty-three special-status animals have been documented in the vicinity of the Project site. Of these species, 10 have "no" potential, 17 have "low" potential, two have "medium" potential, and four have "high" potential for occurrence in the study area. There are no special-status animals identified as "present" in the study area. Yosemite toad (*Bufo canorus*) and willow flycatcher (*Empidonax traillii*) have "medium" potential for occurrence, and Sierra Nevada mountain beaver (*Aplodontia rufa californica*), western white-tailed jackrabbit (*Lupus townsendii townsendii*), Mount Lyell shrew (*Sorex lyelli*), and American badger have "high" potential for occurrence. These species are discussed in more detail below.

Medium Potential

Yosemite Toad

Yosemite toad is endemic to California and is restricted to the Sierra Nevada from the Blue Lakes region north of Ebbetts Pass (Alpine County) south to five kilometers south of Kaiser Pass in the Evolution Lake/Darwin Canyon area (Fresno County); found at elevations ranging from approximately 6,400 to

11,320 feet (1,950 to 3,450 meters).[12] The USFWS has added the Yosemite toad to its list of candidate species, and it is designated a species of special concern by the CDFG and sensitive species by the USFS, Region 5. The Yosemite toad seems to prefer relatively open montane meadows, although forest cover around meadows is also used. It is found in high montane and subalpine associations in meadows surrounded by forest of lodgepole pine or whitebark pines (*Pinus albicaulis*). This toad is largely diurnal emerging from winter hibernation as soon as snow-melt pools form near their winter refuge sites. Overwintering sites are typically rodent burrows (e.g., Beldings ground squirrels (*Spermophilus beldingi*), yellow-bellied marmots (*Marmota flaviventris*), meadow voles (*Microtus montanus*)). The timing of emergence from wintering sites varies with elevation and season, but known dates of emergence range from early May to mid-June.[13] Males form breeding choruses and breeding occurs soon after emergence, in general May through July, and possibly August. Suitable breeding sites are generally found at the edges of meadows or slow, flowing runoff streams. Short emergent sedges or rushes often dominate such sites. Most females spawn during a 2 to 3 day peak each year. Females are estimated to deposit between 1,000 and 1,500 eggs. Eggs strings are typically wound around short emergents in shallow, still water with a flocculent or silty bottom. Following breeding, adults feed in adjacent habitats until entering hibernation (usually late September or early October) and may be active after dark when the nights are warm during midsummer. Larvae hatch in about 3 to 6 days, and typically metamorphose 40 to 50 days after fertilization. Both sexes grow slowly and males begin breeding at 3 to 5 years of age, whereas females begin breeding at 4 to 6 years of age.

Mammoth Creek and the several ponds near Mammoth Creek, as well as the golf course ponds and associated drainages, provide suitable breeding habitat for the Yosemite toad in the study area. The willow-alder riparian, tule-cattail, wet meadow communities found along the edges of these features, as well as the habitats beyond these communities, provide toads with suitable foraging and refuge sites. Toads have been documented moving 492 to 754 feet (150 to 230 meters) each spring from their hibernation sites to their breeding sites, and radio-tagged toads have moved approximately 2,000 feet (610 meters) in a single night.[14] Although the majority of the recorded occurrences of Yosemite toad in the vicinity of the Project site are at much higher elevations, open waters within the Project vicinity have not been surveyed.[15] The closest recorded occurrence is approximately two miles southwest of the Project site. Because of the presence of suitable habitat in the study and the lack of data supporting presence or

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[12] *Jennings, M. R. and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California. Final Report submitted to the California Department of Fish and Game, Inland Fisheries Division. Contract No. 8023. 255 pp.*

[13] *Jennings, M. R. and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California. Final Report submitted to the California Department of Fish and Game, Inland Fisheries Division. Contract No. 8023. 255 pp.*

[14] *NatureServe. 2006. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.1. NatureServe, Arlington, Virginia. Available at http://www.natureserve.org/explorer. (Accessed: December 19, 2006)*

[15] *Personal Communication, Curtis Milliron, California Department of Fish and Game. December 18, 2006 – telephone conversation with Aindrea Jensen.*

absence of this species in the Project vicinity, the Yosemite toad has a medium potential for occurrence in the study area.

Willow Flycatcher

The willow flycatcher is a small migratory passerine that historically nested throughout California, preferring riparian deciduous shrubs, particularly willow thickets. Currently, three subspecies of the willow flycatcher (*Empidonax traillii extimus, E. t. brewsteri,* and *E. t. adastus*) breed in California. Each has been listed as endangered by the CDFG and designated as sensitive species by the USFS, Region 5. The USFWS designated the willow flycatcher as a sensitive species in Region 1 (Washington, Oregon, Idaho, California, and Nevada). Furthermore, the southwestern willow flycatcher (*E. t. extimus*) is listed as endangered by the USFWS. The three subspecies occupy distinct breeding ranges and are differentiated primarily by subtle differences in color and morphology. *E. t. adastus* breeds east of the Sierra/Cascade crestline from the Oregon border south to Inyo County. Males generally arrive at breeding areas first, with females typically arriving a week or two later. Nest building usually begins within a week of pair formation. Egg laying begins as early as the second week in June, but more often starts between June 25th and July 5th. Chicks can be present in nests from mid-July through late August. Young typically fledge from nests from late July through late August. Adults depart from breeding territories as early as mid-August, but may stay until mid-September if they fledged young late in the season. Fledglings probably leave the breeding areas a week or two after the adults leave.[16]

The willow-alder riparian vegetation along Mammoth Creek provides potential breeding and nesting habitat for willow flycatcher. Even if this habitat was surveyed at the appropriate time of year, generalized nesting bird surveys would have likely led to inaccurate results. Willow flycatchers are nondescript in appearance, making them difficult to see in dense vegetation and are not vocal at all times of the day or during all parts of the breeding season. There is an occurrence of willow flycatcher recorded approximately 11 miles northwest of the Project site, near June Lake. For these reasons, willow flycatcher has a medium potential for occurrence within the area designed as open space in the study area.

High Potential

Sierra Nevada Mountain Beaver

Mountain beaver is considered the most primitive living rodent. Four of the seven subspecies of mountain beaver are endemic to California (*Aplodontia rufa nigra, A. r. phae, A. r. humboldtiana, and A. r. californica*). Three of the four subspecies, *Aplodontia rufa nigra, A. r. phae, and A. r. californica,* are designated species of special concern by the CDFG. *Aplodontia rufa nigra,* is also listed as endangered by the USFWS. Each of the four subspecies of mountain beaver in California occupies distinct ranges.

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[16] *Sogge, M. R., R. M. Marshall, S. J. Sferra, and T. J. Tibbitts. 1997. A southwester willow flycatcher natural history summary and survey protocol. Colorado Plateau Research Station, Northern Arizona University: Flagstaff, Arizona. National Park Service Technical Report USGS/NAUCPRS/NRTR-97/12.*

A. r. californica, Sierra Nevada mountain beaver, occupies the Mount Shasta southeastward through the Sierra Nevada and west-central Nevada. Specimens of have been collected from elevations ranging from 3,900 feet (1,190 meters) along Dye Creek in Tehama County to over 10,100 feet (3,080 meters) in Lyell Canyon, Yosemite National Park. The Sierra Nevada mountain beaver typically maintains underground tunnel systems through the narrow willow fringes along streams. However, meadow areas adjacent to stream are preferred sites for this subspecies.[17] Extensive underground tunnels are dug by mountain beavers, forming a network of passages. These tunnels are usually only a few inches below the surface and have many openings, which are nearly always obscured. Local topography such as fallen logs, the slope of the bank, rocks, soil factors, and the location of food plants (e.g., mountain alder (*Alnus tenuifolia*), larkspur (*Delphinium* spp.)) determine the direction and extent of the runways and the location of the entrances and exits. The runways are at least 10 centimeters in diameter and usually not well maintained. Enlargements for nests and temporary food storage are connected to runways. Most nests are located at sites with good drainage, often under mounds, logs, uprooted stumps, logging slash, or in dense thickets. The mountain beaver has a low reproductive rate for a rodent species. It is monestrous and usually does not give birth before its second year. After a 28 to 30 day gestation period, a litter of three or four young is produced in March or April.

Suitable habitat for the Sierra Nevada mountain beaver is present within the willow-alder riparian community along Mammoth Creek, as well as the adjacent wet meadow community. Mountain beavers have been trapped along Mammoth Creek and populations are known from the Mammoth Area.[18] For these reasons, mountain beaver has a high potential for occurrence within the area designed as open space in the study area.

Western White-Tailed Jackrabbit

Western white-tailed jackrabbit is an uncommon to rare year-round resident of the crest and upper eastern slope of the Sierra Nevada, primarily from the Oregon border south to Tulare and Inyo counties. This species was formerly widespread throughout this range, but its population is now fragmented, and numbers have declined drastically.[19] The western white-tailed jackrabbit is designated a species of special concern by the CDFG. Its general habitat associations are sagebrush, subalpine conifer, juniper, alpine dwarf-scrub, and perennial grassland. However, western white-tailed jackrabbit will also use low sagebrush, wet meadow, and early successional stages of various coniferous communities. Within these communities this species prefers open areas with scattered shrubs and exposed flat-topped hills with

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[17] *Steele, D. T. 1989. An ecological survey of endemic mountain beavers (Aplodontia rufa) in California, 1979-83. California Department of Fish and Game, Wildlife Management Division, Admin. Rep. No. 89-1. 39pp. + appends.*

[18] *Steele, D. T. 1989. An ecological survey of endemic mountain beavers (Aplodontia rufa) in California, 1979-83. California Department of Fish and Game, Wildlife Management Division, Admin. Rep. No. 89-1. 39pp. + appends.*

[19] *California Department of Fish and Game. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships version 8.1 personal computer program. Sacramento, California.*

stands of trees, brush, and herbaceous understory. In the summer, western white-tailed jackrabbits migrate to the higher regions and descend to the lower regions in the winter. Winters are typically spent in areas with sagebrush, or in thickets of young trees. Like other hares, white-tailed jackrabbits are nocturnal, feeding mainly from sunset to sunrise. During the day this species usually hides in forms that are shallow holes dug at the base of bushes or beside rocks. The size of the form is about 46 to 61 cm long, 20 to 30 cm wide, and up to 20 cm deep. In winter, they may rest during the day in cavities connected by tunnels dug about 3 ft into the snow. Elaborate and well-traveled trails may be observed that connect forms between often visited feeding sites. The breeding season of white-tailed jackrabbit lasts from February to July, with a peak from March to June. The gestation period is about 30 to 42 days and 1 to 6 young are born in well-concealed depression in the ground or in burrows abandoned by other animals. The newborns invariably sleep during the day and are active at night, usually grooming each other. Young are independent at 3 to 4 weeks of age.

Suitable habitat for the western-white tailed jackrabbit is present within the basin sagebrush, annual grasses and forbs, wet meadow, and perennial grasses and forbs communities in the study area. These communities have the greatest potential to provide habitat for hares during the fall, winter, and spring months. However, given the Project site's elevation, hares could also be present in the summer.[20] There are occurrences of white-tailed jackrabbit recorded in the Project vicinity (one from 1951 at Lake Mary and one from 1955 1.2 miles southeast of Casa Diablo Hot Springs). Additionally, Timothy Taylor, an associate wildlife biologist, with the CDFG, has observed white-tailed jackrabbits more recently in the Sherwin Creek area, south and east of the Project site.[21] Because of the presence of suitable habitat in the study area, the potential for hares to be present year-round, and observations of hares in the Project vicinity, the western white-tailed jackrabbit has a high potential for occurrence in the study area.

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[20] *Personal Communication. Timothy Taylor, California Department of Fish and Game. December 19, 2006 – email to Aindrea Jensen.*

[21] *Personal Communication. Timothy Taylor, California Department of Fish and Game. December 19, 2006 – email to Aindrea Jensen.*

Mount Lyell Shrew

The Mount Lyell shrew is designated a species of special concern by the CDFG. Its known range spans a small area of the east-central Sierra Nevada, including areas in and around Yosemite National Park, in Tuolumne, Mariposa, and Mono counties, at elevations of 6,900 to 10,350 ft (2,100 to 3,155 m). Specimens have been found primarily in wetland communities, near streams, in grassy areas, under willows, and in sagebrush steppe communities. This shrew may occur in similar habitat from Mono County to Modoc County, but the area outside the known range has not been adequately surveyed.[22]

The willow-alder riparian community along Mammoth Creek, as well as the adjacent wet meadow community, provide suitable habitat for the Mount Lyell shrew. Additionally, there are two occurrences recorded within approximately 19 miles of the Project site, one of which the general area of the occurrence encompasses the site. Two female specimens were collected in July 1914 at "Mammoth."[23] The shrew is still presumed present in the general vicinity. For these reasons, Mount Lyell shrew could occur within the area designed as open space in the study area.

American Badger

The American badger is a highly specialized fossorial mustelid that is designated a species of special concern by the CDFG. In California, its range extends practically all over the state except the humid coastal belt, from sea level to alpine meadows, from dry deserts to dense red fir forest. The badger prefers open areas and may also frequent brushlands with little groundcover. Although badger may prefer habitats with more friable soils for digging burrows, which are used for dens, escape, and predation, the hard-baked earth in the middle of an unpaved road is no obstacle. Badgers are mainly active at night, and tend to be inactive during the winter months. When inactive, this species occupies underground burrows that are elliptical shaped and eight or more inches in diameter. Burrows are typically around the dens of ground squirrels (*Spermophilus* sp.) – its chief food – or chipmunks (*Tamias* sp.) and they generally have a single entrance. Badgers use multiple burrows within their home range, and they may not use the same burrow more than once a month. However, in the summer badgers may dig a new burrow each day. Mating occurs in late summer or early autumn and is followed by delayed implantation. Implantation then occurs in February with the young born in March or April. At birth the young are furred but blind. Young may emerge from the den as early as 5 to 6 weeks old; they become independent by August. Typically, badgers have one litter averaging 2 to 3 young.

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[22] *NatureServe. 2006. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.1. NatureServe, Arlington, Virginia. Available at http://www.natureserve.org/explorer. (Accessed: December 6, 2006)*

[23] *California Natural Diversity Database. Biogeographic Data Branch, Department of Fish and Game. November 20, 2006.*

Vegetation communities in the study area provide suitable habitat for the badger. Although there are no occurrences recorded in the vicinity of the Project site and no suitable burrows were observed during field surveys, badgers are present in the area.[24] For these reasons, badgers could occur in the study area.

Other Migratory Birds and Raptors

Migratory birds and raptors forage and nest in a wide variety of habitats throughout Mono County. Typically, migratory birds and raptors nest within trees and other vegetation in areas that are removed from human disturbance; however, some species such as great horned owl (*Bubo virginianus*) and red-tailed hawk are known to nest in and adjacent to developed areas where there is nearby undeveloped lands supporting an abundance of prey. The vegetation communities in the study area provide potential foraging and/or nesting habitat for migratory birds and raptors, including northern harrier (*Circus cyaneus*), prairie falcon (*Falco mexicanus*), red-tailed hawk, sharp-shinned hawk (*Accipiter striatus*), and yellow warbler (*Dendroica petechia*). For this reason, other special-status birds could occur in the study area.

Wildlife Movement Corridors

A wildlife corridor is a linear landscape element which serves as a linkage between historically connected habitat/natural areas that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance, and is meant to facilitate wildlife movement between these natural areas. Corridors are critical for the maintenance of ecological processes including allowing for the movement of animals and the continuation of viable populations. There are three types of wildlife movements within corridors. These include dispersal (i.e., one way movement away from a home site), migration (i.e., round trip movements), and home range movements (i.e., movements within an area with a defined probability of occurrence of an animal during a specified time period). For large herbivores and medium to large carnivores, corridors enable individuals to pass directly between two areas in discrete events of brief duration, facilitating juvenile dispersal, seasonal migration, and home range connectivity. Species with limited dispersal ability that take several days to several generations to pass through a corridor including most plants, reptiles, amphibians, insects, small mammals, and birds must be able to live in the corridor for extended periods. Therefore, the corridor must provide most or all of the species' life-history requirements. Corridors can consist of a sequence of stepping stones across the landscape (discontinuous areas of habitat such as isolated wetlands and roadside vegetation), continuous lineal strips of vegetation and habitat (such as riparian strips and ridge lines), or they may be parts of a larger habitat areas selected for its known or likely importance to local wildlife.

The Project site includes a portion of Mammoth Creek and its associated riparian vegetation, which may be considered an important movement corridor for common fish, reptiles and amphibians, mammals, and

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[24] *Personal Communication. Timothy Taylor, California Department of Fish and Game. December 6, 2006 – telephone conversation with Aindrea Jensen (CAJA staff).*

birds. Although fish species diversity in Mammoth Creek is relatively low,[25] it serves as a travel route for individual fish (e.g., brown trout, rainbow trout, brook trout [*Salvelinus fontinalis*], and tui chub [*Gila bicolor*]) as they move within their home ranges in search for food, cover, and other needs. Mammoth Creek and its associated riparian vegetation may also be used by reptiles and amphibians (e.g., western terrestrial garter snake [*Thamnophis elegans*], tiger salamander [*Ambystoma tigrinum*], western toad, Pacific tree frog), mammals (e.g., mule deer, coyote, raccoon [*Procyon lotor*]), and birds (e.g., mountain chickadee [*Poecile gambeli*], gray-crowned Rosy-finch [*Leucosticte tephrocotis*], white-breasted nuthatch [*Sitta carolinensis*]) for home range movements, as well as dispersal routes. Similarly, the vegetation communities in the remainder of the study area, particularly the undeveloped portion south of Old Mammoth Road and east of Fairway Drive, is likely used by individual animals for dispersal and home range movements. However, these communities do not serve as critical linkages connecting patches of "high quality" habitat considered to be essential to the long-term survival of the species. There are deer populations however in the general Project vicinity that comprise the Rocky Mountain mule deer (*Odocoileus hemiomus hemiomus*) from the Round Valley and Casa Diablo herds, both of which are migratory herds that move from winter to summer range on a seasonal basis. The protection and enhancement of key mule deer winter, holding, migratory, and fawning habitat are vital to their long-term survival.

Deer present closest to the Project site are predominantly from the Round Valley herd of mule deer (formerly known as the Sherwin Grade/Buttermilk herd). CDFG's Management Plan for the Round Valley deer herd identifies the herd boundary as extending from northern Inyo County in the southeast to just north of State Route 203 in the northwest.[26] The winter range of the Round Valley herd is located in the lower elevations of the Round Valley, extending north of Pine Creek in Inyo County into southern Mono County about 20 miles southeast of the Project site. Beginning in early April, deer migrate from Round Valley winter range north into the Sherwin holding area, an 11,300-acre area south of U.S. Highway 395 and generally between Tobacco Flats on the east and Mammoth and Sherwin creeks on the west. The migration corridor between the winter range and the holding area follows the toe of the eastern Sierra slope north from Round Valley to just south of the Town.

The Sherwin holding area is an expansion of the migration corridor where deer congregate and forage until mountain passes are free of snow. The holding area is considered a critical component to the Round Valley deer herd life cycle as the area provides an abundance of high quality forage (e.g., bitterbrush) that is generally not available in the herd's winter range. The nutritional benefits of the forage enable the deer to recover from over-winter weight loss, and it provide energy needed by pregnant does for fawning and

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[25] *CH2MHill/Sacramento. November 2000. Draft Environmental Impact Report/Environmental Impact Statement for the Proposed Changes in Mammoth Creek Instream Flow Requirements, Change of Point of Measurement, and Change of Place of Use.*

[26] *Thomas, Ronald. D. 1985. Management Plan for the Sherwin Grade Deer Herd. California Department of Fish and Game. Bishop, California.*

growth.[27] Two areas of concentrated deer use have been identified in the holding area. The area of most use occurs in the lower eastern portion of the holding area, from Mammoth Creek south to the top of Laurel Mountain burn, and from Laurel Creek east to the Cold Springs Campground Area. The other area of concentrated deer use occurs east of the Project's proposed golf course expansion area in the vicinity of the Sherwin Campground and the Mammoth Motocross.[28]

Deer typically delay continuing their westward migration to the summer range and remain on the Sherwin holding area for a period of four to eight weeks; however, some deer are also known to remain and summer in the holding area.[29] Fewer than 100 individuals may remain in the holding area during the summer. These deer have been documented as using fawning sites during this time in the Project vicinity, one of which is located just south of the existing nine-hole golf course and Snowcreek V development.[30] Deer migrating to the summer range on the west slope of the Sierra Nevada exit the holding area along four migration routes (Solitude/Dutch Pass, Mammoth Rock, San Joaquin Ridge, and Hopkins Pass), generally from mid-May through the end of June.[31] This is a rapid movement with deer estimated to travel the routes within one to five hours.[32] In 1994, the highest number of deer used the Solitude/Duck Pass migration route, which is approximately two miles southeast of the Project site. Smaller numbers used the Mammoth Rock migration route, which is just south of the Town's UGB and the Project site, and the San Joaquin Ridge migration route.[33]

The summer range for the Round Valley deer herd encompasses approximately 2,000 square miles on the west slope of the Sierra Nevada to the San Joaquin Ridge.[34] Deer remain on the summer range until the first major snowfall, generally in late October. During the fall migration, deer follow the same migration

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[27] *U.S. Department of Agriculture, Forest Service. 1997. Final Environmental Impact Statement for the Proposed Snowcreek Golf Course Expansion Project. June 1997.*

[28] *U.S. Department of Agriculture, Forest Service. 1997. Final Environmental Impact Statement for the Proposed Snowcreek Golf Course Expansion Project. June 1997.*

[29] *U.S. Department of Agriculture, Forest Service. 1997. Final Environmental Impact Statement for the Proposed Snowcreek Golf Course Expansion Project. June 1997.*

[30] *United States Department of Agriculture, Forest Service. 1990. Final Impact Statement for the Sherwin Ski Area.*

[31] *United States Department of Agriculture, Forest Service. 1990. Final Impact Statement for the Sherwin Ski Area.*

[32] *United States Department of Agriculture, Forest Service. 1990. Final Impact Statement for the Sherwin Ski Area.*

[33] *Town of Mammoth Lakes. 2005. Revised Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update. October 2005.*

[34] *Town of Mammoth Lakes. 2005. Revised Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update. October 2005.*

routes used in the spring, but deer do not delay migration on the holding area. Instead, deer move rapidly to the Round Valley winter range where snow cover is less and forage is readily available.[35]

Although a population decline from almost 6,000 to less than 1,000 individuals was reported over a six year period in the 1997 *FEIS for the Proposed Snowcreek Golf Course Expansion Project*, the deer population has been fairly stable over the last five to six years.[36] A more recent population estimate for the Round Valley deer herd from January 2006 is 2,952 $\pm$ 939 (95% CI).[37] The previous dramatic population decline was primarily attributed to poor vegetative conditions on the Round Valley winter range caused by successive seasons of drought coupled with past excessive deer use.[38]

Sensitive Natural Communities

Riparian Habitat

As previously discussed in the Regulatory Framework section, riparian habitat is considered a sensitive natural community as it is regulated by CDFG under Section 1600 of the California Fish and Game Code, Lake and Streambed Alteration Program. Approximately 3.6 acres of willow-alder riparian habitat is present along Mammoth Creek in the northern portion of the study area, and in a few small patches around the existing golf course ponds. As discussed above in Vegetation Communities and Wildlife Habitats section, the willow-alder riparian vegetation is not within the development area.

Wet Meadow

Approximately 9.8 acres of wet meadow is present adjacent to the riparian habitat along Mammoth Creek in the northern portion of the study area. This community is within the area designated as open space.

Jurisdictional Resources

As previously discussed in the Regulatory Framework section, the Corps regulates waters of the United States under Section 404 of the CWA, and the SWRCB regulates waters of the State under Section 401 of the CWA and the Porter-Cologne Act through RWQCBs. Such waters include a variety of features including streams, wetlands, and impoundments. Some of these features are exempt from federal jurisdiction if they are found to be unconnected to "navigable waters"; however, such exempt features are

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[35] *U.S. Department of Agriculture, Forest Service. 1997. Final Environmental Impact Statement for the Proposed Snowcreek Golf Course Expansion Project. June 1997.*

[36] *Personal Communication. Timothy Taylor, California Department of Fish and Game. January 12, 2007 – phone conversation with Aindrea Jensen (CAJA staff).*

[37] *Personal Communication. Timothy Taylor, California Department of Fish and Game. January 12, 2007 – email to Aindrea Jensen (CAJA staff).*

[38] *United States Department of Agriculture, Forest Service. 1990. Final Impact Statement for the Sherwin Ski Area.*

often still regulated as waters of the State which are defined as any surface or groundwater within the boundary of the State.

Wetlands

A jurisdictional delineation of waters of the United States, including wetlands, was conducted on the parcel north of Old Mammoth Road by RCI in 2005. Although this delineation included the Snowcreek VII development area, the majority of the wetlands are located within the Snowcreek VIII study area, consisting of approximately 10 acres (Figure IV.D-1). The wetlands are located within a level, topographically low area north and south of Mammoth Creek and is seasonally inundated and dominated by emergent wetland vegetation such as sedges.[39] The tributaries flowing into Mammoth Creek through the Project site are the primary hydrologic source for these wetlands. These wetlands were verified as jurisdictional by the Corps on February 1, 2006. Potential impacts to these wetlands would be regulated by the Corps under Section 404 of the CWA and by the RWQCB under Section 401 of the CWA. However, these areas are outside of the Project's development area.

A jurisdictional delineation of wetlands and waters of the United States was conducted on the southeastern portion of the Project site south of Old Mammoth Road and east of Fairway Drive by DRSA in 2002. Portions of this area support some hydrophytic plant species such as Baltic rush (OBL), Nebraska sedge (OBL), Rocky Mountain iris (*Iris missouriensis,* OBL), and silver sagebrush (*Artemisia cana*, FACW)[40]; however, these areas did not exhibit wetland hydrology or hydric soil characteristics and, therefore, were determined not to be wetlands potentially jurisdictional by the Corps or RWQCB. No portion of this area was verified as jurisdictional by the Corps.[41]

On the existing golf course west of Fairway Drive, the small areas of tule-cattail vegetation along the edges of, and in drainages connecting, several of the golf course ponds would be considered wetlands; however, the golf course ponds were not verified as jurisdictional by the Corps and, therefore, are not subject to regulation under the CWA.[42] However, due to increased regulation of waters and wetlands considered "isolated" (not connected to jurisdictional or "navigable waters" of the United States) by the State under the Porter-Cologne Act following the *SWANNC v. USACE* Supreme Court decision in 2001, impacts to these tule-cattail wetland areas may be regulated by the RWQCB. However, these areas are outside of the Project's development area.

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[39] *Resource Concepts, Inc. 2005. Hilltop Site – Snowcreek Area 7 Wetland Delineation Report. Prepared for Chadmar Group. August 2005.*

[40] *FACW is an abbreviation for "facultative wetland species"; plant species with this wetland indicator have an estimated 67 to 99 percent probability of occurring in wetlands. OBL is an abbreviation for "obligate wetland species"; these species occur with an estimated 99 percent probability in wetlands (U.S. Fish and Wildlife Service. 1993. National List of Plant Species that Occur in Wetlands, Region 10 – California.)*

[41] *Letter from the U.S. Army Corps of Engineers to Dempsey Construction Corporation dated October 17, 2002.*

[42] *Letter from the U.S. Army Corps of Engineers to Dempsey Construction Corporation dated July 8, 2003.*

Other Waters of the United States and Waters of the State

The 2005 jurisdictional delineation conducted on the parcel north of Old Mammoth Road by RCI determined that waters of the United States were present on the Project site within Mammoth Creek, two tributaries and several open water ponds. The main channel of Mammoth Creek runs along the northern portion of the Project site from west to east, and is approximately 1,400 linear feet; a tributary south of the main channel, which flows from the Snowcreek VII development area into the study area northward into Mammoth Creek, is approximately 1,000 linear feet, and another tributary, which flows into Mammoth Creek from the north, is approximately 75 linear feet within the study area. The parcel north of Old Mammoth Road also contains several open water ponds, one of which is within the channel of a tributary flowing into Mammoth Creek from the north. The large pond in the western portion of the parcel was once a maintained, aesthetic pond but has since been abandoned; given its close proximity to the southern tributary, it is likely influenced by groundwater from the tributary and may possibly be fed by overland flows during large storm events. Two smaller ponds, which were excavated for aesthetic purposes, are located near the existing Snowcreek administrative office buildings just west of Old Mammoth Road; these ponds flow into the adjacent wetland meadow through manmade open channels and eventually north into Mammoth Creek. Potential impacts to Mammoth Creek, its tributaries, and the open water ponds north of Old Mammoth Road would be regulated by the Corps under Section 404 of the CWA, by the RWQCB under Section 401 of the CWA, and under Section 1600 of the California Fish and Game Code for Lake and Streambed Alterations. However, these areas are outside of the Project's development area.

The southeastern portion of the Project site south of Old Mammoth Road and east of Fairway Drive supports many ditches, including the Bodle Ditch, which were once used to irrigate the area; however, in about 1989, the water source through the Bodle Ditch was eliminated, and much of the original surface flow into the area has been re-directed through the existing golf course,[43] therefore, most of these ditches are not considered waters of the United States or the State. Two retention basins that are generally unvegetated occur in the study area; one just east of Fairway Drive and one just south of Old Mammoth Road (refer to Figure IV.D-1). The southernmost basin no longer regularly receives water from the dry ditches traversing the study area and, therefore, is not considered waters of the United States or the State. The other retention basin to the north is used as a holding area for overflow from the golf course ponds to the west, and is connected via a constructed open ditch; during periods of extreme precipitation it overflows eastward over a concrete spillway into a wide, shallow channel-like area. However, this area does not exhibit an ordinary high water mark and, therefore is not considered a jurisdictional water.[44] In addition, the retention basin and the connected golf course ponds and drainages/ditches were not verified as jurisdictional by the Corps because they do not have a normal hydrologic connection to Mammoth

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[43] *D.R. Sanders and Associates, Inc. 2002. Identification/Delineation of Wetlands on a Portion of Snowcreek Resort Property in Mammoth Lakes (Mono County), California. Prepared for Dempsey Construction. June 27, 2002.*

[44] *Letter from the U.S. Army Corps of Engineers to Dempsey Construction Corporation dated July 8, 2003.*

Creek, a jurisdictional water of the United States.[45] However, since the retention basin, golf course ponds, and connecting drainages/ditches support surface water, they may be considered jurisdictional waters of the State and subject to regulation by the RWQCB under the Porter-Cologne Act.[46] These featuresmay also be considered jurisdictional by CDFG and may be regulated under the Section 1600 of the California Fish and Game Code for Lake and Streambed Alterations. The retention basin, golf course pond, and connecting drainage/ditch east of Fairway Drive are the only features located within of the Project's development area.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G of the *CEQA Guidelines*, the proposed project could have a significant environmental impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of a native wildlife nursery site;

- Conflict with an local polices or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

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[45] *Letter from the U.S. Army Corps of Engineers to Dempsey Construction Corporation dated July 8, 2003.*

[46] *Personal Communication. Tobi Tyler, Lahontan Regional Water Quality Control Board. December 6, 2006.*

Project Description

The Project consists of adoption by the Town of the Snowcreek VIII, Snowcreek Master Plan Update – 2007 to update the existing 1981 Snowcreek Master Plan and address proposed build-out of the Snowcreek Master Plan area (Snowcreek VIII/Project area). Snowcreek VIII is intended to fulfill the vision of the previously approved Snowcreek Master Plan and this EIR will update the Town's 1974 and 1981 EIRs for the previous iterations of the Snowcreek Master Plan. In addition to the development previously constructed or approved, the Project has been designed to integrate residential, resort, recreation, retail, and public amenities. For a detailed discussion of the Project description, refer to Section III (Project Description) of this Draft EIR.

Project Impacts and Mitigation

The impacts of the Project on biological resources are grouped below into major categories of impacts. The actual impact and its anticipated location in the study area are described in detail within each major category below.

Impact BIO-1 Special-Status Species

Plants

Thirty-five special-status plants were evaluated for their potential for occurrence in the study area, ten of which were determined to have "medium" or "high" potential for occurrence. Nine of these plant species (Lemmon's milk-vetch, scalloped moonwort, common moonwort, subalpine draba, Blandow's bog-moss, Hockett Meadow lupine, scalloped-leaved lousewort, Robbin's pondweed, and subalpine fireweed) would not be impacted by the Project because surveys conducted at the appropriate time of year did not detect the species (e.g., Robbin's pondweed) and/or communities potentially supporting the species (e.g., wet meadow) are located within the area designated as open space in the northern portion of the Project site that would not be directly disturbed by construction-related activities. Implementation of mitigation measures recommended under "Impact BIO-2: Sensitive Natural Communities" would also ensure that special-status plants species potentially occurring within the open space would not be inadvertently impacted.

The one remaining special-status plant species (Masonic rock cress) could be significantly impacted by the Project. Surveys were not conducted at the appropriate time of year when Masonic rock cress would be both evident and identifiable and, consequently, this species may be present within the basin sagebrush communities in the development area. Project construction would result in the removal of the majority, if not all, of the basin sagebrush present in the development area. This could result in potentially significant impacts to Masonic rock cress, if present. Implementation of **Mitigation Measure BIO-1a** would reduce potential impacts to these species to a ***less-than-significant*** level.

Animals

Of the 33 special-status animal species evaluated for potential occurrence in the study area, six were determined to have "medium" or "high" potential for occurrence. Impacts of the Project on each of these animal species are addressed below.

Amphibians and Reptiles

Yosemite toad could occur in Mammoth Creek and the several ponds near Mammoth Creek, as well as the golf course ponds and associated drainages on the Project site. These features provide suitable breeding habitat for toads, while the adjacent communities provide suitable foraging and refuge habitat. Although these aquatic habitats are not located in the development area, toads could use the adjacent terrestrial habitats and, consequently, could occupy communities within the development area, particularly around the existing golf course ponds. Project construction could result in potentially significant impacts to the Yosemite toad. If present, construction-related activities would result in temporary and permanent habitat loss and could potentially result in direct mortality, injury, or harassment of toads, especially during the time of year when toads are moving to and dispersing from aquatic habitats, and decreased water and habitat quality. Implementation of **Mitigation Measure BIO-1b** would reduce impacts resulting from the Project to Yosemite toad to a ***less-than-significant*** level.

Birds

The willow-alder riparian corridor along Mammoth Creek provides potential breeding and nesting habitat for willow flycatchers. Although this habitat is within the area designated as open space, averaging over approximately 250 ft from the development area, and direct disturbance of Mammoth Creek and its associated riparian corridor would not occur, construction-related activities (e.g, noise and vibrations from construction equipment, increased human activity) could disturb nesting willow flycatchers, if present. The nesting season is a critical period for the maintenance of bird populations and disturbance activities that cause birds to abandon an active nest or direct nest upset are considered a potentially significant impact. Implementation of **Mitigation Measure BIO-1c,** scheduling construction activities outside the 3 to 4 month breeding season (June 1st through September 15th) or, if not feasible, conducting protocol-level surveys, would reduce construction-related impacts to breeding and nesting willow flycatchers to ***less than significant***.

The Mammoth Creek riparian corridor, as well as the other vegetation communities in the study area, also supports potential breeding and nesting habitat for other migratory birds (e.g., yellow warbler) and raptors (e.g., red-tailed hawk, sharp-shinned hawk). Construction activities, such as vegetation clearing and grubbing and grading, could have significant impacts on breeding birds by destroying nests and nesting habitat and/or causing nest abandonment. Implementation of **Mitigation Measure BIO-1d** would reduce potentially significant impacts to other breeding and nesting migratory birds and raptors to a ***less-than-significant*** level.

Following construction, breeding and nesting migratory birds, including the willow flycatcher, and raptors could be directly and/or indirectly impacted by increased human-related disturbances indirectly caused by the Project. Construction and operation of the Project would likely result in increased incidental contact and intrusion impacts. Also, species adapted to more disturbed environments and tolerant of human activities would increase in abundance and possibly cause declines of the more sensitive species by competing for the same resources and/or preying upon young. Implementation of **Mitigation Measure BIO-1e**, which includes good wildlife management practices, would reduce potentially significant post construction impacts to a ***less-than-significant*** level.

Conversion of previously undeveloped lands on the Project site would result in the loss of potential foraging habitat for a number of special-status bird species, such as northern harrier, prairie falcon, and sharp-shinned hawk. Project construction would convert a total of approximately 155 acres of basin sagebrush, annual grasses and forbs, and perennial grasses and forbs habitat. Though this loss would contribute to the local reduction of available foraging areas, potentially affecting individual birds using the site, the loss of foraging habitat onsite would not substantially reduce the number or restrict the range of special-status bird species in the Project vicinity. The basin sagebrush, annual grasses and forbs, and perennial grasses and forbs communities are widespread throughout the region and the proximity of the Project site to development areas and the level of human-related disturbances (e.g., recreational activities, traffic) associated with these areas likely limits the use of these habitats. The loss of foraging habitat would be considered ***less than significant***.

Mammals

Sierra Nevada Mountain Beaver and Mount Lyell Shrew

The Sierra Nevada mountain beaver and Mount Lyell shrew could occur within the willow-alder riparian corridor along Mammoth Creek and the adjacent wet meadow. These species would not be directly impacted by the Project because communities potentially supporting the mountain beaver and shrew are within the area designated as open space that would not be directly disturbed by construction-related activities. Additionally, implementation of mitigation measures recommended under "Impact BIO-2: Sensitive Natural Communities" would ensure that these special-status animal species would not be inadvertently impacted, if present. Good wildlife management practices such as those outlined in Mitigation Measure BIO-1e would also reduce post-construction impacts to the Sierra Nevada Mountain Beaver and Mount Lyell shrew to ***less than significant***.

Western White-Tailed Jackrabbit

Suitable habitat for western white-tailed jackrabbit is present within the basin sagebrush, annual grasses and forbs, wet meadow and perennial grasses and forbs communities in the study area. The noise and vibrations from construction equipment associated with Project construction and other construction-related activities (e.g., increased human activities, foot and vehicle traffic) would likely create disturbance that should be sufficient to cause juvenile and adult hares occurring within the development area to move

away from the construction area. However, disturbances, such as vegetation clearing and grubbing and grading, during the breeding season (February through July) could result in directly destroying the nest, killing or injuring young, and/or exposing the nest to predators. In California hares may only breed once per year,[47] and consequently the loss of young could have a population base impact. This would be considered a significant impact. Implementation of **Mitigation Measure BIO-1f,** pre-construction surveys, would reduce impacts to white-tailed jackrabbits to a ***less-than-significant*** level.

The loss of habitat for the western white-tailed jackrabbit resulting from development of the Project would be considered a ***less-than-significant*** impact. Though the conversion of the basin sagebrush, annual grasses and forbs, and perennial grasses and forbs communities could affect individual hares, it would not substantially reduce the number or restrict the range of hares present in the Project vicinity. These communities are widespread throughout the region. The wet meadow community is within the area designated as open space and would not be directly impacted by construction activities.

American Badger

Vegetation communities east of the existing golf course and north of Old Mammoth Road provide potential habitat for the American badger. Badgers occupy underground burrows during periods of inactivity, which may be for a few hours to days. Also, burrows are used during the breeding season. If present in the development area, construction activities could result in direct loss of active burrows and/or individuals. This would be a potentially significant impact. Implementation of **Mitigation Measure BIO-1g,** pre-construction surveys, would reduce the potential loss of active badger burrows and/or individual badgers to ***less than significant***.

Similar to the western white-tailed jackrabbit, the loss of habitat for American badger resulting from Project development would be considered ***less than significant***. The conversion of the suitable habitat for the badger would likely affect individual badgers, if present, but it would not substantially reduce the number or restrict its range present in the Project vicinity.

Mitigation Measure BIO-1a

To determine presence or absence of Masonic rock cress in the development area, a qualified biologist shall conduct focused surveys according to CDFG guidelines[48,49] for this species prior to the onset of construction activities. The surveys shall be conducted at the proper time of year when this plant is both evident and identifiable. A qualified biologist is an individual who possesses the following qualifications:

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[47] *California Department of Fish and Game. California Interagency Wildlife Task Group. 2005. California habitat Relationships version 8.1 personal computer program. Sacramento, California.*

[48] *California Department of Fish and Game. 1983. Guidelines for conducting and reporting botanical inventories for federally listed, proposed and candidate plants. Unpublished information sheet, revised 2000.*

[49] *California Department of Fish and Game. 2000. Guidelines for assessing effects of proposed developments on rare and endangered plants and plant communities. Unpublished information sheet.*

1) experience conducting floristic field surveys; 2) knowledge of plant taxonomy and plant community ecology; 3) familiarity with the plants of the area, including rare, threatened, and endangered species; 4) familiarity with the appropriate state and federal statutes related to plants and plant collecting; and 5) experience with analyzing impacts of development on native plant species communities.

If Masonic rock cress is not found in the development area, no further mitigation would be required. However, if this plant species is located, the survey will determine the number of individuals present and the limits of the area occupied by the population, and one of the following additional mitigation measures shall be implemented:

(a) avoidance and permanent protection of the onsite population;

(b) permanent preservation of an existing, offsite population of the species in the region at a 2:1 acreage ratio; or

(c) transplant the individuals to permanently preserved habitat on- or off-site at a 1:1 acreage ratio. If transplanted offsite, the location should preferably be adjacent to the site or in close proximity.

Each additional mitigation option above (a – c) shall include the preparation of a Preservation Plan (under a or b) or a Mitigation Plan (under c) by a qualified biologist to be submitted to and approved by the Town. The Preservation or Mitigation Plan shall include the location and extent of the preserved or transplanted individuals and measures to ensure protection of the population during and following Project implementation (in perpetuity), including a mechanism to ensure permanent preservation of the population from development such as a conservation easement. The Plan shall also include methods to transplant the individuals (if applicable), measures to maintain the population (i.e., weed control), and methods to monitor the population for a minimum of five years following preservation or transplantation, including performance criteria and contingency measures in case of failure to meet the established performance criteria.

Mitigation Measure BIO-1b

To avoid substantial adverse affects to Yosemite toad, a qualified biologist shall conduct surveys following standard visual encounter techniques supplemented with dipnetting surveys to confirm presence or absence of toads in the study area. At minimum, the biologist shall be familiar with the distinguishing physical characteristics of all life stages of the Yosemite toad and other amphibians found in the Sierra Nevada region of California. The biologist shall also hold all necessary federal, state, and local agency permits for surveying and handling this species. Because the actual timing of visual encounter and dipnetting surveys for Yosemite toad may vary depending primarily on the watershed characteristics, regional snow pact, timing and rate of spring runoff, day length, average ambient air and water temperatures, and local and seasonal weather conditions, the biologist shall visit nearby accessible occurrences of Yosemite toad (reference sites) to identify the breeding period in the vicinity of the Project site. The biologist shall then conduct at least one to two visual encounter surveys from May through July at the appropriate time of day to determine presence or absence of toads onsite. If during the initial

breeding survey, no individual Yosemite toads or egg masses are encountered, subsequent surveys shall be conducted two to four weeks later. Approximately four to eight weeks after completing the breeding survey(s), dipnetting surveys for tadpoles shall be conducted (usually July through August).

If no individual toads (e.g., adults or tadpoles) or egg masses are encountered, no further mitigation would be required. However, if Yosemite toad is encountered the following measures shall be implemented:

- A qualified biologist shall develop and implement, in coordination with the USFWS, CDFG, and USFS, an exclusion and relocation program for Yosemite toads within the development area. The design and type of exclusion fencing, as well as the method and location of relocation shall be approved by the resource agencies prior to implementation.

- Pre-construction surveys of aquatic habitats and adjacent terrestrial habitat shall be conducted in all work area by qualified biologist within two weeks of initiating work. Any observed toads shall be relocated according to procedures outlined in the exclusion and relocation program developed and implemented above. Active work areas shall be re-surveyed regularly between May and September.

- During construction activities, all trash that may attract predators will be properly contained, removed from the work area, and disposed of regularly. Following Project construction, all trash and construction debris shall be removed from work areas.

- Any fueling and maintenance of vehicles and other equipment and staging areas shall be at least 65 ft (20 m) from any willow-alder riparian community or waterbody.

- Appropriate sediment and erosion control best management practices (BMPs) shall be implemented to protect the water quality of the Mammoth Creek and the several ponds near Mammoth Creek, as well as the golf course ponds and associated drainages. BMPs to be implemented shall be described in the Project site's stormwater pollution prevention plan (SWPPP) and shall be installed according to the manufacture's specifications.

- Areas temporarily disturbed by construction activities shall be recontoured and revegetated. An appropriate assemblage of vegetation that is suitable for the area shall be used during restoration efforts.

Mitigation Measure BIO-1c

To avoid substantial adverse affects to nesting willow flycatchers, construction activities, including vegetation clearing and grubbing and grading, on the portion of the development area north of Old Mammoth Road shall be conducted outside of the nesting season (June 1st through September 15th). If

this is not feasible, then a qualified biologist holding all necessary federal, state, and agency permits shall conduct protocol-level surveys for willow flycatchers following methods outlined in *A Willow Flycatcher Survey Protocol for California*[50] to confirm presence or absence in the study area. A qualified biologist is an individual who has sufficient knowledge, training, and experience with bird identification and surveys to distinguish the willow flycatcher from other non-*Empidonax* species, and recognize the willow flycatcher's primary song. Also, it is strongly recommended that the biologist has attended a willow flycatcher survey training workshop. The protocol is based on the use of repeated tape-playback surveys during pre-determined periods of the breeding season: Survey Period 1: June 1st through June 14th; Survey Period 2; June 15th through June 25th; and Survey Period 3: June 26th through July 15th. It requires a minimum of two surveys on the site, one during Survey Period 2 and one during either Survey Period 1, or Survey Period 3 to document presence or absence of willow flycatchers during the survey year. In addition, successive surveys must be at least five days apart; surveys done fewer than 5 days apart are not considered to be in separate survey periods.

If no willow flycatchers are detected in the study area, no further mitigation would be required. However, if willow flycatcher is detected, the CDFG shall be contacted for a final discussion on the possibility of doing construction-related activities during the breeding season. Also, in coordination with the CDFG, a long-term (i.e., greater than five year) monitoring program shall be developed and implemented in order to protect the existing population and provide baseline data to make well-informed, adaptable management plans, if needed in the future. Regardless of whether or not flycatchers are detected, the willow flycatcher survey forms (Form 1; Willow Flycatcher Field Survey Form, Form 2; Willow Flycatcher Survey Summary-Site Description, and Form 3: Willow Flycatcher Survey Summary-Results Summary) shall be submitted to the CDFG by October 1st of each year.

Mitigation Measure BIO-1d

To avoid substantial adverse affects to other nesting migratory birds and raptors, one of the following measures shall be implemented:

- Conduct vegetation removal and other ground disturbance activities associated with Project construction during the non-breeding season (September 16th through March 14th); OR

- Conduct pre-construction surveys for nesting birds if construction activities are to take place during the nesting season (March 15th through September 15th). Pre-construction surveys shall be conducted by a qualified biologist once per week for eight consecutive weeks at the appropriate time of day during the breeding season and shall end no more than three days prior to the onset of construction activities to confirm presence or absence of active nests in the Project vicinity (at least 300 feet around the development area). If active nests are encountered, species-specific measures shall be prepared by a qualified biologist, in coordination with the CDFG and other

[50] *Bombay, H. L., T. M. Ritter, and B. E. Valentine. 2006. A willow flycatcher survey protocol for California. June 6, 2000.*

appropriate agencies, and implemented to prevent direct loss or abandonment of the active nest. At a minimum, construction activities in the vicinity of nest shall be deferred until the young have fledged and an exclusion buffer zone shall be established. A minimum exclusion buffer of 25 feet is typically recommended by CDFG for songbird nests, and 200 to 500 feet for raptor nests, depending on the species and location. The perimeter of the nest-setback zone shall be fenced or adequately demarcated with staked flagging at 20-foot intervals, and construction personnel restricted from the area. A survey report by the qualified biologist verifying that the young have fledged shall be submitted to the Town for review and concurrence prior to initiation of construction activities within the nest-set-back zone. The survey report shall also be submitted to the CDFG for review.

Mitigation Measure BIO-1e

The following good wildlife management practices shall be implemented to reduce impacts to nesting migratory birds and raptors, as well as other wildlife species, following Project development.

- Domestic pets belonging to residents or visitors shall be prohibited from entering the adjacent undeveloped lands or open space areas. Signage shall be posted and maintained along the boundaries of the development area indicating such prohibitions and educating the community about domestic pets as a conservation threat to birds and other wildlife.

- Signage shall be installed along the existing nature trails on the Project parcel north of Old Mammoth Road educating the community about the breeding season being a vital period in birds' and other animals' lives and disturbances during this time may result in nest or young abandonment.

- Educational brochures shall be distributed to residents and visitors discussing the importance of not supplementing the diet of avian nest predators such as jays (*Cyanocitta* sp.), magpie (*Pica* sp.), ravens (*Corvus corax*), and brown-headed cowbird (*Molothrus ater*) by feeding them during the breeding season. Also, educational brochures shall instruct residents and visitors not to feed wildlife or allow wildlife access to trash. This could lead to increased natural mammalian predators such as raccoon, fox (*Vulpes* sp.), and opossum (*Didelphis virginiana*). These predators tend to benefit disproportionately from human habitation, and as their populations expand they are negatively affecting the health of bird and other animal populations.

- Night lighting associated with the Project shall be designed to provide illumination of target areas with minimal offsite visibility to avoid potentially illuminating wildlife use areas located within and adjacent to the development area.

Mitigation Measure BIO-1f

To avoid substantial adverse affects to western white-tailed jackrabbit, one of the following measures shall be implemented:

- Conduct vegetation removal and other ground disturbance activities associated with Project construction during the non-breeding season (August 1st through January 31st); OR

- Conduct pre-construction surveys for western white-tailed jackrabbit if construction activities are to take place during the breeding season (February 1st through July 31st). Pre-construction surveys shall be conducted by a biologist familiar with this hares' habitat and sign (e.g., tracks, pellets) once per week for five consecutive weeks and shall end no more than three days prior to the onset of construction activities to confirm presence or absence of hares within the Project's development area. If hares or evidence of hare is encountered, the qualified biologist, in coordination with the CDFG, shall develop and implement site-specific measures (e.g., exclusion buffer zone, nesting monitoring) to avoid loss of nests or young. A survey report by the qualified biologist verifying the presence or absence of western white-tailed jackrabbit and describing measures developed and implemented to avoid hares, if determined present, shall be submitted to the Town for review and concurrence prior to initiation of construction activities.

Mitigation Measure BIO-1g

To avoid substantial adverse effects to badgers, a qualified wildlife biologist shall conduct an initial survey for active burrows at least 30 days prior to initiation of construction activities to confirm presence or absence of badger in the project vicinity (at least 150 feet around the development footprint). If no individual badgers or evidence of badger is found, no further mitigation would be required at this time. However, if badger is detected, site-specific measures (e.g., exclusion buffer zone, nesting monitoring) shall be prepared by a qualified biologist, in coordination with the CDFG and other agencies as appropriate, and implemented to prevent direct loss of active burrows and/or individuals. Regardless of whether badger is detected during the initial survey, a subsequent survey for badger in the Project vicinity shall be conducted no more than 3 days prior to the initiation of construction activities to confirm no new burrows have established in the intervening period. A survey report by the qualified biologist verifying that there are no active burrows present in the development footprint shall be submitted to the Town for review and concurrence prior to initiation of construction activities. The survey report shall also be submitted to the CDFG for review.

Impact BIO-2 Sensitive Natural Communities

Riparian habitat is present in the study area along Mammoth Creek; however, the Project would not result in direct impacts (e.g., removal or damage) of this vegetation community, and would instead preserve this community, as well as the adjacent wet meadow, as open space. Similarly, the small areas of riparian habitat around the existing golf course ponds would not be directly impacted by Project construction.

Although no direct removal or damage would occur in these areas from the Project, indirect impacts could occur from adjacent development such as inadvertent damage from equipment or vehicle staging, or erosion. Implementation of **Mitigation Measure BIO-2a** would reduce this potential impact to ***less than significant***.

Development of the Project could also affect the riparian and wet meadow communities, as well as the other natural communities, present in the vicinity by indirectly introducing non-native plant species into these areas. Seeds and plant parts of non-native species could get onto the Project site by various means (e.g, construction equipment and materials [e.g., straw wattles], clothing material and vehicles of workers, landscaping plants). Once onsite non-natives could spread throughout the disturbed areas and, eventually, into the undisturbed natural areas. Establishment of invasive, non-native plants can upset the ecological balance of plants, animals, soils, and water achieved over many years as native plants are displaced, animal populations that rely on the plants for food and shelter decline, runoff patterns are altered and increase soil erosion, and water levels are reduced or depleted. The effects of this impact would be minimized by implementation of **Mitigation Measure BIO-2b**.

Potential jurisdictional waters and wetlands are present in the study area, which are considered sensitive; however, these features are addressed under "Impact Bio-3: Jurisdictional Resources" below.

While the other vegetation communities present in the study area are not considered sensitive, they contain some trees that meet the minimum size (six inches in diameter) to require approval from the Town prior to removal; impacts to these trees are addressed under "Impact Bio-5: Conformance with Town Policies and Ordinances" below.

Mitigation Measure BIO-2a

To avoid potential inadvertent impacts to preserved sensitive habitats (riparian habitat, wet meadow, or other jurisdictional features) adjacent to the development area, the following measures shall be implemented prior to and during construction activities:

- Prior to construction activities, the boundaries of sensitive habitats that will not be impacted shall be plotted on all construction plans and maps, including a minimum buffer of 10 feet or more as determined by a qualified biologist.

- Silt fencing and construction fencing (or flagging to make the silt fencing more visible) shall be installed around the sensitive habitat and buffer, and the final location of the installed fencing shall be approved by a qualified biologist prior to initiation of construction activities.

- Encroachment into the sensitive habitat and buffer shall be prohibited by construction personnel, and storage of materials or equipment shall be prohibited in this area.

- Prior to the onset of construction activities, construction personnel shall be briefed on the location of sensitive habitat and other resources that shall be persevered and the importance of avoidance.

- The silt fence shall be monitored regularly during construction activities to ensure that the fencing remains intact and functional, and that no encroachment has occurred into the sensitive habitat or boundary; any repairs to the fence or encroachment correction shall be conducted immediately. A memo summarizing monitoring dates, observations, and repairs/corrections shall be prepared following each construction season and submitted to the Town.

- Appropriate sediment and erosion control best management practices (BMPs) shall be implemented to protect water quality of Mammoth Creek and its adjacent wet meadow community during and following project construction. The BMPs to be implemented shall be described in the site's stormwater pollution prevention plan (SWPPP) and shall be installed according to the manufacturer's specifications.

- All fueling and maintenance of vehicles and other equipment and staging areas shall be at least 50 ft (15 m) from sensitive habitats.

Mitigation Measure BIO-2b

To minimize establishment of invasive, non-native plant species on the site, the following measures shall be implemented.

- A construction schedule shall be developed to closely coordinate activities such as clearing, grading, and reseeding, to ensure areas are not prematurely stripped of native vegetation and revegetation activities be conducted as soon as possible following development.

- Vegetation disturbances shall be limited to those areas identified on construction plans and maps as slated for development or construction staging.

- Native and compatible non-native plant species, especially drought resistant species, shall be used for revegetation. Refer to the list of *Plants that Thrive in Eastern Sierra Gardens'* prepared by Mono County.

- Landscaping will not use invasive non-native plants that threaten wildlands according to the California Invasive Plant Inventory made available by the California Invasive Plant Council (Cal-IPC).

- Erosion and sediment control materials shall be certified as weed-free.

Impact BIO-3 Jurisdictional Resources

Jurisdictional waters of the United States, including wetlands, and waters of the State, are present in Mammoth Creek, its tributaries, several open water ponds and in the adjacent wet meadow community in the study area north of Old Mammoth Road. Although no direct impacts would occur in these areas from the Project, as the area north of the development area would be preserved as open space, indirect impacts

could occur from adjacent construction activities such as inadvertent damage from equipment or vehicle staging, or erosion. Implementation of Mitigation Measure BIO-2a above would reduce this potential impact to a ***less-than-significant*** level.

The existing golf course ponds west of Fairway Drive and the drainages and ditches that connect them are not considered federally jurisdictional features; however, these areas may be considered waters of the State subject to regulation by the RWQCB, and may be considered lakes or streambeds subject to regulation by CDFG. However, similar to the other waters in the study area north of Old Mammoth Road, these features are not located within the Project's development area, and implementation of Mitigation Measure BIO-2a would reduce any potential indirect impacts resulting from construction activities to ***less than significant***.

The existing golf course pond, the northernmost retention basin, and the drainage/ditch connecting these features located south Old Mammoth Road and east of Fairway Drive are also potentially subject to regulation by the RWQCB and CDFG (but are not considered to be federally jurisdictional). The Project would result in reducing the stormwater retention of the existing golf course pond (i.e., lowering the spillway at the eastern end of the pond) and replacing the detention basin and drainage/ditch with a series of unlined stormwater control basins and a vegetative swale (refer to Appendix G, Draft EIR Technical Appendices, Hydrology Data). Impacts to these features would be reduced to ***less than significant*** with implementation of Mitigation Measure BIO-3.

Mitigation Measure BIO-3

Prior to the onset of construction activities, including concrete and riprap removal associated with the reduction of the stormwater retention in the existing golf course pond, and vegetation clearing and grubbing and grading associated with the creation of the stormwater control basins and vegetative swale, a Waste Discharge Requirement (WDR) permit application shall be submitted to RWQCB and a Lake or Streambed Alteration Notification shall be submitted to CDFG for impacts to the existing golf course pond, the northernmost retention basin, and the drainage/ditch connecting these features. Mitigation measures associated with permits may include impact minimization measures such as implementation of best management practices (i.e., erosion and sediment control measures) and seasonal work restrictions, and possibly habitat compensation measures such as the restoration plantings in the vicinity. Impacts to potentially jurisdictional features shall not occur until the permits are received from the appropriate regulatory agencies, or correspondence is received from the agencies indicating that a permit is not required.

Impact BIO-4 Wildlife Movement, Migration Corridors, and Native Wildlife Nurseries

The reach of Mammoth Creek in the study area is considered an important movement corridor for resident fish, reptiles and amphibians, mammals, and birds. It serves as a travel route for individuals as they move within their home ranges. Because Mammoth Creek and its associated riparian vegetation and adjacent

wet meadow community would remain as open space, the Project would not result in impacts to movement corridors associated with Mammoth Creek.

Similar to the Mammoth Creek corridor, the remainder of the study area, particularly the undeveloped portion south of Old Mammoth Road and east of Fairway Drive, is likely used by resident wildlife species for dispersal and home range movements. However, the study area does not constitute a critical connection between larger areas of suitable habitat considered to be essential to the long-term survival of the species, particularly considering the extent of developed areas to the immediate west and north. Therefore, the Project would not result in significant impacts to wildlife movement for most resident and native wildlife species.

No major migratory routes for the Round Valley mule deer herd or other important migratory animals in the region occur within the study area.[51,52] However, as indicated in the *Snow Creek Land Exchange Environmental Assessment*,[53] approximately 46 acres of the Sherwin holding area within the former federal parcel, which comprises the southern and eastern portions of the study area, south of Old Mammoth Road and east of Fairway Drive, would be lost as a result of the proposed golf course expansion. Furthermore, an additional approximately 49 acres of potential foraging and resting habitat south of Old Mammoth Road and east of Fairway Drive that may be used by deer in the adjacent holding area would be lost by Project construction. Individual deer in the adjacent holding area likely use this area given the close proximity, the continuity of basin sagebrush habitat between the study area and the holding area to the south and east, and the composition of the basin sagebrush habitat in the study area, which supports bitterbrush, a key forage species for deer in the holding area.[54] Twenty-one percent of deer observations (37 of 175 observations) made during weekly deer count surveys were reported within the proposed golf course expansion area in the 1997 *FEIS for the Proposed Snowcreek Golf Course Expansion Project*.[55] Although the loss of the holding area and the additional foraging and resting habitat represents a loss of less than one percent of the habitat within the 11,300 acre holding area, this could be potentially significant. The holding area is an expansion of the migration corridor and is a crucial stop-over area where deer can enhance their nutritional status before completing their migration to summer ranges. Additionally, one of the two noted areas of concentrated deer use on the holding area occurs just east of the Project site, in the vicinity of the Sherwin Campground and Mammoth Motocross.[56] Given the

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[51] *Draft Program EIR Town of Mammoth Lakes 2005 General Plan Update, Environscientists, Inc., Mammoth Lakes, CA, February 2005*

[52] *Taylor, T. 1993. Snowcreek Ski Area Deer Migration Study. Prepared for Dempsey Construction Company.*

[53] *Inyo National Forest. 2003. Snowcreek Land Exchange Environmental Assessment. United States Department of Agriculture, Forest Service, Pacific Southwest Region.*

[54] *Personal Communication. Tim Taylor, California Department of Fish and Game. December 7, 2006 – phone conversation with Shannon Lucas (CAJA staff).*

[55] *U.S. Department of Agriculture, Forest Service. 1997. Final Environmental Impact Statement for the Proposed Snowcreek Golf Course Expansion Project. June 1997.*

[56] *U.S. Department of Agriculture, Forest Service. 1997. Final Environmental Impact Statement for the Proposed Snowcreek Golf Course Expansion Project. June 1997.*

proximity of the area of concentrated use and the Mammoth Rock migration route to the site, the loss of this habitat could further constrict the already narrow corridor.[57] The loss of the holding area and additional foraging and resting habitat could be reduced to a ***less-than-significant*** level by implementation of **Mitigation Measure BIO-4a**.

Construction-related activities (e.g., noise and vibration from construction equipment, increase human activity) could result in disturbance of individual mule deer currently using the holding area and the study area for foraging and resting, as well as individuals exiting the holding area along the Mammoth Rock migration route, located south of the Project site. Disturbed holdover and resident deer would likely disperse away from construction activities into adjacent undisturbed natural areas or abandon using the holding area. Deer relocating to adjacent habitats could subsequently create overcrowding and increased competition among individuals, and eventually, result in over-utilization of these areas. Individuals abandoning the holding area may leave before they are nutritionally fit, making them vulnerable during the migration to the summer range; this is particularly true for pregnant does. Construction-related disturbances could also cause deer to change their migration corridor route or move further south into higher elevations where snow conditions may interfere with successful migration to the summer range. Although these impacts would be temporary, as they would only occur during the construction period, implementation of **Mitigation Measure BIO-4b**, prohibiting major construction activities (e.g., vegetation clearing and grubbing and grading) until deer have completed spring and fall migration (generally from April 15 through June 1 and from October 1 through November 15),[58] would reduce construction-related disturbance impacts to ***less than significant***.

Following construction, deer using the holding area and the Mammoth Rock Migration route could be directly and/or indirectly impacted by the operation of the residential, resort, recreational, retail, and public amenities components of the Project. The Project would likely result in increased human incidental contact and intrusion impacts. Such disturbances can cause increased stress or deer to flee, significantly increasing energy expenditures of deer. Also, deer could be indirectly impacted by, but not limited to, noise levels, traffic volumes, outside lighting, and domestic animals. Depending on the scope and intensity of such indirect affects, deer may continue to use the holding area and migration route, select alternate undisturbed areas, or abandoned the nearby holding area and migration route. The Project has been designed such that the residential and resort components would be clustered toward the northern portion of the Project site and the golf course would create a buffer around these components. Although this design could reduce post-construction impacts to deer using the nearby holding area and migration route, impacts can extend well beyond the actual area developed. Implementation of **Mitigation Measure BIO-4c** would further reduce potential impacts to deer to a ***less-than-significant*** level. Mitigation Measure BIO-4c includes additional good wildlife management practices to those outlined in

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[57] *U.S. Department of Agriculture, Forest Service. 1997. Final Environmental Impact Statement for the Proposed Snowcreek Golf Course Expansion Project. June 1997.*

[58] *Personal Communication. Timothy Taylor, California Department of Fish and Game. December 7, 2006 – phone conversation with Shannon Lucas (CAJA staff).*

Mitigation Measure BIO-1e above. Measures are consistent with goals and policies in the Town's adopted 1987 General Plan (e.g., 1987 General Plan – Wildlife Resources Goal 2 and Policy 4).

The golf course vegetation and associated habitats could attract deer, leading to the request for depredation permits and/or construction of deer-proof fencing. Such request would be considered potentially significant impacts because they would result in direct take of deer and interfere with movement patterns, respectively. Additionally, the golf course would increase deer exposure to herbicides and insecticides applied to associated landscaping; however, there is little chance of any direct mortality or indirect effect from exposure to pesticides.[59] Implementation of good wildlife management practices outlined in **Mitigation Measure BIO-4c** would reduce these additional impacts to deer to ***less than significant***.

As discussed in more detail in the Wildlife Movement Corridors section, a small number of deer from the Round Valley herd may remain in the Mammoth area during the summer, and have been documented as using a fawning site southwest of the Project site.[60] However, this fawning site is located at least one-half mile from the Project site. Given the distance between the Project site and fawning site, construction and operation of the Project is not likely to substantially affect use of this native wildlife nursery site, resulting in ***less-than-significant*** impacts.

Mitigation Measure BIO-4a

To offset the loss of holding area deer habitat, the applicant shall purchase or contribute funds to purchase a conservation easement on property(ies) that contain important lands in the winter range, migration corridor, and/or holding area of the Round Valley mule deer herd or any other migratory mule deer herd within the Mammoth Lakes vicinity as determined by the CDFG. The amount of acreage to be purchased or made part of a conservation easement ("replacement land") to offset the loss of mule deer habitat by this project shall be determined by the CDFG, and based upon the recommendation of a qualified biologist. The location and quantity of replacement land shall be based upon the acreage of deer habitat affected by the development and the comparative benefits or value to the mule deer herd of the habitat being removed by this project to the area being acquired or protected. Consequently, the CDFG shall not be required to utilize a simple removal to replacement ratio, but shall be permitted to consider other factors such as the quality and quantity of plant foraging material in the removal area and the replacement area and whether the replacement area land serves to protect important lands in the winter range, migration corridor and/or the holding area for the herd. In lieu of providing for replacement land, the CDFG may approve other means recommended by a qualified biologist by which the applicant shall protect or enhance habitat for the Round Valley mule deer herd or any other migrating mule deer herd

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[59] *U.S. Department of Agriculture, Forest Service. 1997. Final Environmental Impact Statement for the Proposed Snowcreek Golf Course Expansion Project. June 1997.*

[60] *United States Department of Agriculture, Forest Service. 1990. Final Environmental Impact Statement for the Sherwin Ski Area.*

within the Mammoth Lakes vicinity, such as erecting fencing along U.S. Highway 395 to protect the deer herd from vehicular traffic, providing monetary contributions toward the construction of a deer undercrossing along U.S. Highway 395, or other means to enhance the herd's habitat, or protect the herd, that is roughly proportional to the impact on the deer herd of the loss of deer herd habitat caused by the project (the "in lieu protection program").

The proposed land protection agreement or in lieu protection program shall be prepared by the applicant in close consultation with the Town, CDFG and directly affected parties (i.e., the seller(s) of the conservation easement or the recipients of the monetary contributions under the in lieu program). Prior to the onset of construction activities associated with the development of the new golf course, located on those portions of the site that have historically been deer habitat (refer to areas labeled "I" on Figure III-4), the Town shall receive a signed copy of the land protection agreement, executed by all directly affected parties as defined above, or obtain written confirmation from CDFG of CDFG's approval of the in lieu protection program proposed by the applicant. Construction activities include vegetation clearing and grubbing and grading. In all events, implementation of the approved land protection agreement or in lieu protection program shall be commenced to the CDFG's satisfaction, prior to any grading of the approximately 46 acres of impacted deer habitat. Implementation shall be completed in stages, to the satisfaction of the CDFG, so as to ensure that the mitigation occurs within a sufficiently short period of time after the impact has occurred, in order to minimize any possibility of an unmitigated impact. The Town will reserve the option to delay the onset of construction activities in the event it determines that implementation of the proposed land protection agreement or in lieu protection program has been unduly delayed or obstructed by the applicant.

Mitigation Measure BIO-4b

Major construction activities (e.g., vegetation clearing and grubbing, and grading) within the development area south of Old Mammoth Road shall not occur when significant numbers of migrating deer are present in the Project vicinity (generally during the period from April 15 through June 1 and from October 1 through November 15) to avoid potential adverse impacts to the Round Valley mule deer herd using the Sherwin holding area and Mammoth Rock migration route during the spring and fall migration periods. Because the actual dates of construction will be based on deer arrival at and departure from the Project vicinity, which will depend on weather and snow conditions, a monitoring program shall be developed and implemented, in coordination with CDFG and other appropriate agencies, to determine the presence of deer in the area. All major construction activities shall be conducted during the interim periods between spring and fall migration periods only.

Mitigation Measure BIO-4c

In addition to the good wildlife management practices outlined in Mitigation Measure BIO-1e, the following habitat management practices shall be implemented:

- No fences or other potential impediments to deer and other wildlife movement shall be installed along the outer edges of the Project site, particularly along the southern and eastern Project boundaries for deer.

- No depredation permits for controlling deer shall be requested. The applicant recognizes that the development of lands within deer habitat contains associated risks of damage, which is acceptable.

- Require management practices of landscapes treated with pesticides that minimize low-level exposures and sub-lethal effects to wildlife. Herbicides, pesticides, and fungicide application records and other landscape and turfgrass management records shall be made available to the Town or CDFG at any time upon request.

Impact BIO-5 Conformance with Town Policies and Ordinances

A total of 106 trees have been identified within the development area that meet the minimum size (six inches in diameter) to require approval from the Town prior to removal (Town of Mammoth Lakes Municipal Code, Chapter 17.16.050).[61] Of these trees, 22 are native, naturally occurring trees, such as Jeffrey pine, lodgepole pine. The remaining 84 trees are non-native trees, such as blue spruce (*Picea pungens*), and the majority of these have been planted for landscaping purposes. Although not documented in the Town's Municipal Code (Chapter 17.16.050), it is the Town's intent not to protect all live trees but, native trees over six inches in diameter.[62] The applicant plans to retain all the native trees within the development area, as well as, to the extent feasible, all the non-native trees subject to a review of the trees' health and status by a certified arborist.[63] Because all the native trees over six inches are intended to be retained and any proposed for removal following the arborist's review would be subject to approval from the Town prior to their removal, the Project would have ***no impact*** on trees regulated by the Town.

As discussed above in Impact BIO-2 Sensitive Natural Communities, indirect, unanticipated impacts to waters and wet meadow habitat could occur during construction activities within the development area in the adjacent basin sagebrush habitat north of Old Mammoth Road, such as inadvertent damage from equipment or vehicle staging, or erosion. Such impacts would conflict with goals and policies in the Town's adopted 1987 General Plan, specifically Natural Vegetative Resources Policy 3 and Habitat. However, implementation of Mitigation Measure BIO-2b, requiring fencing, monitoring, and other best management practices, would reduce these impacts to ***less than significant***.

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[61] *Denise Duffy & Associates, Inc. (DD&A). 2007. Letter to Bill Taylor, Town of Mammoth Lakes. July 17, 2007.*

[62] *Personal Communication. Bill Taylor, Town of Mammoth Lakes. July 10, 2007 – phone conference with CAJA and the applicant's team.*

[63] *Denise Duffy & Associates, Inc. (DD&A). 2007. Letter to Bill Taylor, Town of Mammoth Lakes. July 17, 2007.*

The Project could also result in increased wildlife and human interactions, particularly along the southern and eastern Project boundaries where deer and other wildlife may reside. Incidental human contact and intrusion impacts would conflict with the goals and policies in the Town's adopted 1987 General Plan, specifically Wildlife Resources Policy 3. However, implementation of Mitigation Measure Bio-1e and Mitigation Measure Bio-4c, which includes good wildlife habitat management practices such as lighting and fencing restrictions, and domestic pet control, would reduce these impacts to a ***less-than-significant*** level.

Impact BIO-6 Conformance with Adopted Habitat Conservation Plans, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

No Habitat Conservation Plans, Natural Community Conservation Plans or other local or regional plans have been adopted within the Town's UGB which encompasses the Project site,[64] therefore, no impacts are anticipated and no mitigation would be considered necessary.

CUMULATIVE IMPACTS

Impact BIO-7

This section addresses cumulative biological resource impacts associated with the Project. These are impacts to biological resources which result from combined, incremental impacts of the Project when added to other closely related past, present and foreseeable future projects. Cumulative impacts can result from individually minor, but collectively significant impacts taking place over a period of time. The following cumulative impact analysis is based on a review of related projects in the vicinity of the Project site (refer to Table II-1) and aerial photographs.

Special-Status Species

With respect to special-status species impacts identified under the Project described above, some of the related projects may also have the potential to impact special-status plants and animals. These projects could result in direct take of species, construction and post construction disturbances, and/or habitat conversion. However, with the measures prescribed to mitigation such impacts under the proposed Project, and given the small size of the related projects and/or the location in existing developed areas, these impacts are not anticipated to be cumulatively considerable when evaluated with other related projects in the vicinity.

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[64] *Draft Program EIR Town of Mammoth Lakes 2005 General Plan Update, Environscientists, Inc., Mammoth Lakes, CA, February 2005*

Sensitive Natural Communities

The Project has been designed to avoid direct impacts (e.g., placement of fill material, vegetation removal) to natural communities and habitats that are subject to the regulatory and resource agencies' jurisdiction. For the purposes of this discussion, this includes waters of the United States, including wetlands, waters of the State, and riparian and wet meadow communities. Additionally, measures prescribed to mitigate indirect affects, such as inadvertent damage by construction equipment or staging, and construction runoff, would reduce potential adverse indirect impacts to less than significant. Because of the Project's design and prescribed mitigation measures, the potential addition of related projects impacts to the Project's sensitive natural communities' impacts are not anticipated to be cumulatively considerable.

Migratory Deer

As discussed in the Project Impacts and Mitigation Measures section of this Draft EIR, the Project would result in the loss of about 46 acres of the Sherwin holding area and an additional loss of about 49 acres of potential foraging and resting habitat for the Round Valley mule deer herd. Because the holding area plays such an integral role in affecting productivity of the deer herd, removal of this habitat from the proposed project is considered potentially significant. Human-related disturbances associated with the construction and operation of the Project could result in significant impacts to deer using the holding area and the Mammoth Rock migration route. When these impacts to migratory deer from the proposed Project's are considered collectively with related projects in the vicinity, these impacts may be cumulatively considerable, as they may result in an overall disturbance to mule deer migration along the Mammoth Rock corridor. Given the small size of the related projects (especially relative to the proposed Project) and/or the location of most of the related projects in existing developed areas, this impact to deer migration holding area is not considered cumulatively significant.

When the Project's impact to deer migration holding area is compared to the existing environmental setting, including past projects, this impact may be considered cumulatively considerable. This herd has already exhibited population decline, possibly due to residential development within the winter range and migration corridors.[65] The Round Valley herd once utilized the entire Mammoth Lakes basin for its holding area and migration corridor,[66] but it has since been pushed further east and south due to development within the Town of Mammoth Lakes over the past century. This may be responsible for the current shape of the western end of the holding area and the Mammoth Rock migration route, which are shaped such that they are located just outside of the developed portions of the Town. However, the implementation of Project mitigation measures, including the proposed land protection agreement or in

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[65] *Snowcreek Golf Course Expansion Project FEIS Appeal Response letter from USFS to Sierra Club Toiyabe Chapter, dated September 26, 1997. Appeal No. 97-05-00-0056-A215, File Code 1570-1/2430-2.*

[66] *Personal Communication. Timothy Taylor, California Department of Fish and Game. December 7, 2006 – telephone conversation with Shannon Lucas.*

lieu protection program, restrictions on the construction season, and implementation of good wildlife management practices, the impacts to migratory deer holding area from the Project and past projects is not expected to be cumulatively considerable.

As the number of residents in the Town increases, vehicular mortality to deer may increase. However, the 2005 General Plan Update Draft EIR noted that this impact is not anticipated to significantly affect the herd's population.

Inyo National Forest – Recreational Impacts to Biological Resources

Based on a review of the related projects in the vicinity of the Project site (Table II-1) and aerial photographs, few of these projects are likely to have significant impacts to biological resources due to their small size and/or location in existing developed areas. With respect to the biological impacts identified under the Project described above, some of the related projects in the area may also have the potential to impact special-status plant and animal species, wildlife movement corridors, and sensitive natural communities, including protected trees. However, with the measures proposed to mitigate impacts under the proposed Project, and given the small size of the related projects as compared to the proposed Project, these impacts are not anticipated to be cumulatively considerable or significantly adverse when evaluated with other related projects in the vicinity.

The cumulative impacts discussion under Population & Housing (Section IV.K), notes that the Project when considered with other related residential projects in the area, would result in an estimated permanent population increase of approximately 11,460 persons. The anticipated population increase may have significant impacts upon special-status species within the adjacent Inyo National Forest, and it is anticipated that the 2007 General Plan, adopted August 15, 2007, includes policies requiring the Town to work closely with agencies, including the Inyo National Forest, to ensure that the regional natural ecosystem is maintained.

The Inyo National Forest is one of the 10 most visited units in the USFS system, and visitation to the Inyo National Forest and adjacent areas has been growing consistently over the past several years and is expected to grow at similar levels over the next 20 years.[67] The cumulative population growth from the Project and related residential projects of nearly 11,460 persons, and their potential impact to natural resources in the Inyo National Forest, are relatively insignificant compared to the impacts from the approximately 130,000 to 150,000 summer visitors and 1.3 million winter visitors to the Town.[68] However, while only 8.3 percent of the Forest's visitors are regional residents (from the 93546 and 93514 zip codes), regional residents account for nearly 25 percent of visitor frequency (regional residents had a

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[67] *Federal Highway Administration and Federal Transit Administration. Field Report – Inyo and Humboldt-Toiyabe National Forests Eastern Sierra Expanded Transit System.*

[68] *Federal Highway Administration and Federal Transit Administration. Field Report – Inyo and Humboldt-Toiyabe National Forests Eastern Sierra Expanded Transit System.*

visitor frequency of 124 as compared to 380 for other visitors).[69] The primary activities of forest users are viewing natural features, relaxing, hiking, walking, downhill skiing/snowboarding, cross-country skiing, camping, and fishing.[70] Although many of these activities have generally low impacts on natural resources, particularly when conducted in accordance with existing USFS management controls (such as well-planned and maintained trails, camping area restrictions, limited wilderness area permits, and ski area capacity limits[71]), a cumulative increase in these activities from additional frequent resident visitors may have an adverse impact on sensitive resources from excessive use, possibly resulting in erosion, habitat degradation, and wildlife habituation and disturbance.

Increased visitor use and the associated management of natural resources within the Inyo National Forest are being addressed by the U.S. Forest Service through planning efforts including the *USFS Trail and Commercial Pack Stock Management in the Ansel Adams and John Muir Wildernesses FEIS* and the *Inyo National Forest Winter Needs Assessment* conducted in collaboration with the Town in 2003 and 2004. In addition, the Inyo National Forest will need to update its Forest Land and Resource Management Plan, as it is nearly 20 years old and out-of-date,[72] in accordance with the *Sierra Nevada Forest Plan Amendment (SNFPA)*. The SNFPA gives management direction to all forests to address problems of (1) old forest ecosystems and associated species, (2) aquatic, riparian, and meadow ecosystems, (3) fire and fuels, (4) noxious weeds, and (5) lower westside hardwood forests.[73] The SNFPA requires an assessment of existing environmental conditions and identification of management options at various geographic, jurisdictional, and temporal scales, and the implementation of adaptive management procedures to adjust the management direction for future events, changing knowledge, or dynamic social views.[74]

Impacts to natural resources within the Inyo National Forest from recreational use are expected to increase due to the Town's cumulative population increase from the Project and other regional residential projects, and these impacts may be considered cumulatively considerable or significantly adverse; however, identification and quantification of such impacts would be speculative under the current analysis. Potential impacts to sensitive natural resources within the Inyo National Forest should be evaluated as part of the Forest's Land and Resource Management Plan Update, which will identify and assess existing conditions with respect to recreational areas in accordance with the SNFPA. The SNFPA identifies bird watching, hiking/backpacking, downhill skiing and primitive camping as some of the fastest growing outdoor recreational activities in the U.S., and projects an over 100 percent increase in downhill skiing and an over 250 percent increase in snowmobiling for the Pacific coast region through

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[69] *Inyo National Forest. 2003. National Visitor Use Monitoring Results, Inyo National Forest. USDA Forest Service, Region 5. August 2003.*

[70] *Federal Highway Administration and Federal Transit Administration. Field Report – Inyo and Humboldt-Toiyabe National Forests Eastern Sierra Expanded Transit System.*

[71] *Personal Communication, CAJA staff: Mike Schlafmann, U.S. Forest Service. July 5, 2006.*

[72] *Personal Communication, CAJA staff: Mike Schlafmann, U.S. Forest Service. July 5, 2006.*

[73] *U.S. Forest Service. 2001. Sierra Nevada Forest Plan Amendment, Final EIS. U.S. Department of Agriculture, Forest Service, Pacific Southwest Region. January 2001.*

[74] *Ibid.*

2050.[75] Therefore, it is reasonable to assume that much of the recreational Forest uses from the cumulative population growth in the area will revolve around these increasingly popular outdoor activities.

Compliance with the Town's 2007 General Plan, requiring the Town to work closely with agencies, including the Inyo National Forest, to ensure that the regional natural ecosystem is maintained, will not result in cumulatively considerable impacts to sensitive natural resources in the Inyo National Forest from increased population and recreation.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Biological resource impacts would be ***less than significant*** after implementation of the mitigation measures.

[75] *U.S. Forest Service. 2001. Sierra Nevada Forest Plan Amendment, Final EIS. U.S. Department of Agriculture, Forest Service, Pacific Southwest Region. January 2001.*

IV. ENVIRONMENTAL IMPACT ANALYSIS
E. CULTURAL RESOURCES

INTRODUCTION

The information and analysis in this section is based primarily on the following reports:

- Archaeological Test Excavations at the Snowcreek Site (CA-MNO-3), Mammoth Lakes, California, prepared by Trans-Sierran Archaeological Research (TSAR), November 1990 (i.e., "Archaeological Test Excavations").

- Excavations at Snowcreek Site, Contributions to Trans-Sierran Archaeology 58, Mammoth Lakes, California, prepared by TSAR, May 2006 (i.e., "Excavations at Snowcreek").

- Technical and Cost Proposal Archaeological Studies Snowcreek VIII, Mammoth Lakes, California, prepared by TSAR, September, 5 2006 (i.e., "Technical and Cost Proposal").

- Preliminary Report of Survey and Testing for the Snowcreek Phase VIII Development, Mammoth Lakes, California, prepared by TSAR, November, 15 2006 (i.e., "Preliminary Report").

- Peer Review of Cultural Resources Studies for the Snowcreek VIII Master Plan EIR, Town of Mammoth Lakes, Mono County, prepared by SWCA Environmental Consultants, November 18, 2006 (i.e., "Review of Studies").

- Cultural Resources Study for the Snowcreek VIII Master Plan, Mammoth Lakes, California, prepared by TSAR, December 2006 (i.e., "Cultural Resources Study").

The Cultural Resources Study and accompanying peer review memoranda are included in Appendix E of this EIR.

ENVIRONMENTAL SETTING

Prehistory and History Summary

Archaeological surveys conducted throughout the Mammoth Lakes region for various projects have identified numerous archaeological sites throughout the region. The majority of sites have been characterized as stoneworking, but subsistence sites have also been identified including rockshelters and hunting camps. The Mammoth Lakes area was an intersection of several ethnic groups including the Mono Lake Paiute to the north, the Owens Valley Paiute to the south, Benton and Round Valley Paiute to the east, Monache to the west, and the Southern Sierra Miwok to the northwest. The area provided a variety of food sources during snow-free months including fish, small game, deer, antelope, in addition to

roots and greens. Trade and travel most likely occurred in the summer months when the high Sierran passes were free of deep snow.

During the Pre-Medithermal (pre-3500 B.C.) and Medithermal (3500 B.C. to 1200 B.C.) period, occupation of Long Valley was most likely sporadic. During the Newberry period (1200 B.C. to A.D. 600) obsidian quarrying, and biface production were intensive in Long Valley. During the Haiwee (A.D. 600 to 1300) and Marana (1300 to historic) periods, biface production decreased and subsistence activity increased. Occupation sites in the Long Valley are typically associated with riparian settings. Pinyon exploitation did not begin intensively until the Haiwee period and there may have been a partial abandonment or reduction in the use of upland and desert scrub areas after A.D. 1000.

Prospecting and mining in the Mammoth Lakes area began in the late 1870s. The Mammoth Mining Company was organized and four townsites were built to the west of the Project site including Pine City, Mill City, Mammoth City, and Mineral Park. Old Mammoth Road, which crosses the Project site, most likely dates back to this time. In the 1880s cattle and lumber replaced mining as the main enterprise in the area. In the early 1900s recreation and tourism became a dominant industry in the region.

Literature Review and Records Search

As part of the Cultural Resource Study (2006) included in Appendix E to this EIR, TSAR conducted a review of pertinent literature and cultural resources research addressing the Project site and immediate vicinity. This review included a search of the California Historical Resources Information System (CHRIS) records housed at the Eastern Information Center (EIC) at the University of California, Riverside. This records search was intended to find all cultural resources studies, previously recorded historic sites, and previously recorded prehistoric archaeological sites filed with the EIC for the Project site and a 0.5-mile radius surrounding the Project site. EIC sources reviewed included:

- The EIC's historical resources files (site records).
- National Register of Historic Places (NRHP) (Office of Archaeology and Historic Preservation 1997).
- California State Historic Resources Inventory.
- California Points of Historical Interest (California Department of Parks and Recreation 1992).
- California Historical Landmarks (California Department of Parks and Recreation 1990).
- USGS Quadrangles: Old Mammoth, CA 1994 (7.5 minute).
- General Land Office (GLO) plats.

- Aerial Photographs (from 1942 to present).
- GeoFinder Historical Resource Database.

Two sites are known within the Project area, archaeological site CA-MNO-3, which includes remnants of the "Old Mammoth" townsite, and CA-MNO-893H, the Bodle Ditch. Each of these is discussed separately below.

Archaeological Surveys

Over half the area in and around the Town of Mammoth Lakes has been surveyed for cultural resources for timber sales, resort development, land exchanges, and other projects. Areas developed prior to 1983, when cultural resources surveys became part of the standard environmental review for developments on private land, have not been surveyed. Over 50 archaeological sites, including prehistoric quarries, workshops, plant procurement sites, and temporary camps, have been recorded within the Town of Mammoth Lakes. Most of these sites can be characterized as sparse- to heavy-density lithic scatters, most evidently temporary camps related to obsidian production and trade. Only a few historic-era sites, mostly cabins and small trash dumps, have been recorded. Ten archaeological surveys have been previously conducted within the Project area, covering the entire 237 acres of the Project site. However, the survey intensity is not known for over 100 acres in the western portion of the Project site. Nine surveys were undertaken when the area was public land administered by the Inyo National Forest. These studies were considered adequate to meet Federal requirements, which are similar to, or more strict than, California State law, and were sufficient to transfer the land out of Federal ownership. However, because some surveys are over 20 years old, some resources that did not qualify as historic at the time of the original survey, may now be considered historic.

No additional sites meeting CHRIS criteria were encountered within the Project area during the survey completed in the fall of 2006. However, four additional bedrock milling stations were encountered within the CA-MNO-3 site.

Archaeological Site CA-MNO-3 (with remnants of the "Old Mammoth" Townsite)

The CA-MNO-3 site consists of approximately 18 acres of extensive lithic scatter and seven bedrock milling features and midden (culturally modified soils) along Mammoth Creek. The site was preliminarily identified as potentially significant because of the density and diversity of cultural material present.

Field work completed for Archaeological Test Excavations (1990) consisted of the manual excavation of 11 one-by-one meter units and two mechanically excavated trenches. Over 90,000 artifacts, ecofacts (such as charcoal), and other samples were recovered including 89,758 pieces of debitage (small pieces of stone debris that break off during the manufacturing of stone tools), 218 flaked stone tools, 68 preforms (material that has undergone preliminary shaping but is not yet in its final form), roughouts and blanks

(thick, shaped stone bifaces of suitable size and configuration for refining into a stone tool), 10 cores, a hammerstone, seven ground stone artifacts, a sherd (fragment of pottery or other ceramic vessel), seven bone fragments, fire-cracked rock, charcoal, and historic artifacts. Analysis included flaked stone classification and debitgate analysis, soil chemistry, seven radiocarbon assays, 178 source-specific obsidian hydration readings, and X-ray fluorescence sourcing of obsidian. Historic artifacts that likely post date 1900 were recovered including wire and square nails, fragments of white ware plates, glass fragments, and two metal buckles.

Analyses of recovered materials suggests that the site was first used approximately 4,000 years ago, but that the primary use of the site was during the Newberry and Haiwee periods (1200 B.C. to A.D. 1300). Earlier occupation was limited to use as a temporary camp for non-hunting subsistence related activities. Approximately 1,000 years ago, subsistence and biface production increased at the site, peaking around A.D. 1200. Four distinct areas, A through D, were identified. Area A, located in the northwest adjacent to Mammoth Creek, was determined to have been the site of a subsistence-related base camp dating to the Haiwee period. Area B, located in the southeast in the meadow, was determined to have been the site of a subsistence-based temporary camp dating to the Newberry period. Area C, located on the southwest ridgetop, was determined to have been a workshop or stone reduction area dating to the Haiwee period. Area D consists of fill brought in during modern construction activities. The probable source of the fill is CA-MNO-722 located less than one-quarter mile away. Additionally, a fifth site area was identified during work conducted in 1991 along the north side of CA-MNO-3 between Areas A and D. This area was utilized most intensively during the Haiwee period with activities that included large-scale production of bifacial performs and roughouts with some subsistence activities.

Field work described in Excavations at Snowcreek (2006) included the controlled excavation of 16 one-by-two meter units. Disturbance was evident to a depth of 110 centimeters and many units were crossed by modern or historic pipe. However, prehistoric cultural material extended to over 150 centimeters in depth in some areas investigated and disturbance was localized and small in scale. Numerous flaked stone tools, hundreds of bifaces, abundant debitage, manos, metate fragments (stone artifact used for processing grain and seeds), a hammerstone, and other artifacts were recovered. Historic artifacts date to the early twentieth century, with trash deposits indicating deposition between 1912 and 1930.

As discussed in the Cultural Resources Study (2006), archaeological work included background research, pedestrian archaeological survey of 177 acres, recording of historic features, and excavation of 79 shovel tests. Field work was completed in the fall of 2006 and included the recording through taped measurements, sketch maps, GPS readings, and photographs of the historic-period features. All but one of the historical features identified are located outside of the Project site. The shovel tests were completed from Minaret Road west to the edge of the Project area, northeast of the Snowcreek Rental office. Prehistoric, historic, and modern artifacts were found in all shovel test units. Over 6,000 prehistoric and over 400 historic or modern artifacts were recovered. Prehistoric artifacts included projectile points, finished biface tools, trade bifaces, retouched flakes, unfinished flake stone tools, debitage, cores and core fragments, and fire-cracked rock. Historic artifacts included fragments of glass

bottles, structural remains, leather, rubber, concrete, and bottle caps. Results of the work indicate that there are still substantial prehistoric and possibly historic deposits north of Old Mammoth Road.

As discussed in the Cultural Resources Study (2006), the "Old Mammoth" townsite extends into the Project area and overlaps a portion of the CA-MNO-3 site. The "Old Mammoth" townsite, Mammoth's first resort, includes the two-story Wildasinn Hotel (later destroyed by fire). The hotel was built by Charles F. Wildasinn and power for the hotel was supplied by a Knight Wheel that had been salvaged from mining operations. Wildasinn also built a cabin (which still stands), a small store, and sawmill. All of the buildings, save the cabin, were bought by Charlie Summers, who built a new hotel and store called Mammoth Camp in 1918. From 1918 to 1927, Mammoth Camp consisted of a two-story rooming house and hotel, a barn, corrals, Wildasinn's cabin, and a few other cabins, some of which still remain. In 1927, a fire destroyed most of Mammoth Camp. By the 1930s the Town, known simply as "Mammoth," consisted of a service station (built in 1923), a trading post, a grocery store, a cafe, the Wildasinn cabin, and five or so other cabins north of Old Mammoth Road, within and west of the project area. A Forest Service ranger station, a bakery, and a garage were located to the east, where today Old Mammoth Road crosses Mammoth Creek. When State Highway 203 was completed to the north of old Mammoth in 1937, most businesses moved there. The parcel was bought by Frank Arcularius and fences were constructed to facilitate cattle grazing. In the 1970s, the Dempsey Corporation bought the land and acquired the adjacent Forest Service parcels.

A brass interpretive plaque is located on a boulder near the Knight Wheel and shed. The original part of the Wildasinn Cabin is still clearly visible, in spite of more recent additions. However, until the Cultural Resources Study (2006), neither the existing structures nor the archaeological features of Old Mammoth had been recorded as a historic property in the California Historical Resource Inventory System.

Location

Site CA-MNO-3 extends along Mammoth Creek into the north and west parts of the Project site and includes remnants of the "Old Mammoth" townsite north of Old Mammoth Road.

Archaeological Site CA-MNO-893H (The Bodle Ditch)

The Bodle ditch system was constructed in 1879. Originating at Coldwater Creek above Lake Mary, the ditch supplied water and power to Mill City for both mining and domestic use. A side ditch was used to irrigate pasture in the meadow in the southern portion of CA-MNO-3. The meadow supplied feed for both local cattle destined for Mill City and Mammoth City, and large herds en route to Reno from the Owens Valley. Later, dairy cows and sheep grazed on Windy Flat. The Bodle Ditch was recorded by the U.S. Forest Service in the 1970s. Water rights of Bodle Ditch were purchased by the Mammoth County Water District in the 1980s and irrigation was discontinued. In the 1990s the California State Historic Preservation Office found the Bodle Ditch to be not eligible for the National Register of Historic Places. There is no indication that the determination of eligibility was finalized, however, and the portion of the

ditch within the Project site was transferred out of federal ownership. A ditch and pipeline associated with the historic component of the CA-MNO-3 site was identified, however, it is located outside of the current Project area.

Location

Bodle ditch is located in the southwest portion of the Project site.

Native American Consultation SB-18 Tribal Consultation

Pursuant to Government Code §65352.3 and Senate Bill (SB) 18, the Town of Mammoth Lakes (Town) contacted the California Native American Heritage Commission (NAHC) on April 6, 2006 to request a Tribal Consultation List with contact information for the tribes identified by the NAHC as having traditional lands or cultural resources within the Project vicinity.

The NAHC responded on October 25, 2006 with a list of four tribal entities:

- Benton Paiute Reservation;
- Bridgeport Paiute Indian Colony;
- Mono Lake Indian Community; and
- Antelope Valley Paiute Tribe

The Town sent consultation letters to each of the four NAHC-listed tribal entities on November 2, 2006, inviting each group to consult with them directly regarding the potential for the presence of Native American cultural resources that may be impacted by the Project. Three of the NAHC-listed tribal entities received consultation letters from the Town on November 7, 2007. The Antelope Valley Paiute Tribe letter was unclaimed and returned to the Town on December 7, 2006. The Town left voicemails with the Antelope Valley Paiute Tribe to inform them of the Project, but the voicemails were not returned. The Bridgeport Paiute Indian Colony, who stated they have no interest in the Project site, is the only tribe that has responded to date.[1]

[1] *Letter received from Charlotte Baker, Chairperson Bridgeport Paiute Indian Colony to Jen Daugherty, Assistant Planner, December 12, 2006.*

ENVIRONMENTAL IMPACTS

Thresholds of Significance

Based on Appendix G of the *CEQA Guidelines*, a project would have a significant impact on cultural resources if the project would:

(a) Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5;

(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;

(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or

(d) Disturb any human remains, including those interred outside of formal cemeteries.

For purposes of CEQA, to determine whether cultural resources could be significantly affected, the significance of the resource itself must first be determined. Section 15065 of the *CEQA Guidelines* mandates a finding of significance if a project would eliminate important examples of major periods of California history or prehistory.

In addition, pursuant to Section 15064.5 of the *CEQA Guidelines*, a project could have a significant effect on the environment if it "may cause a substantial adverse change in the significance of an historical resource." A "substantial adverse change" means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource is impaired." Material impairment means altering "…in an adverse manner those characteristics of an historical resource that convey its historical significance and its eligibility for inclusion in the California Register of Historical Resources." Impacts to those cultural resources not determined to be significant according to the significance criteria described above are not considered significant for the purposes of CEQA.

Historical Resources

Pursuant to Section 15064.5 of the *CEQA Guidelines*, a historical resource (including both built environment and prehistoric archaeological resources) is presumed significant if the resource is listed on the California Register of Historical Resources (CRHR) or has been determined to be eligible for listing by the State Historical Resources Commission. A historical resource may also be considered significant if the lead agency determines, based on substantial evidence, that the resource meets the criteria for inclusion in the CRHR. The criteria are as follows:

1. The resource is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. The resource is associated with lives of persons important in our past;

3. The resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4. The resource has yielded, or may be likely to yield, information important in prehistory or history.

Unique Archaeological Resources

Pursuant to Section 15064.5 of the *CEQA Guidelines*, archaeological resources, not otherwise determined to be historical resources, may be significant if they are unique. Pursuant to Public Resources Code Section 21083.2, a unique archaeological resource is defined as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets one of the following criteria:

1. The resource contains information needed to answer important scientific questions and there is a demonstrable public interest in that information;

2. The resource has a special and particular quality, such as being the oldest of its type or the best available example of its type; or

3. The resource is directly associated with a scientifically recognized important prehistoric or historic event or person.

A non-unique archaeological resource means an archaeological artifact, object, or site that does not meet the above criteria. Non-unique archaeological resources receive no further consideration under CEQA.

Human Remains

According to Section 15064.5 of the *CEQA Guidelines*, all human remains are a significant resource. Section 15064.5 of the *CEQA Guidelines* also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are spelled out under Public Resources Code Section 5097.

Paleontological Resources

According to Appendix G of the *CEQA Guidelines*, a project could have a significant effect if it would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Project Impacts and Mitigation Measures

The Project would require grading of the topographic features of the Project site to the extent necessary for construction of the Project. As such, the Project may have the potential to impact cultural resources (including historical, archaeological, and paleontological resources, as well as human remains) that are either known to exist within the Project site or have potential to be buried within the site. Following is a discussion of potential Project impacts to known and unknown cultural resources.

Impact CULT-1 Impacts to Known Cultural Resources

Part of the Project site had been public land administered by the Inyo National Forest before a land exchange put it into private ownership. As noted, nine surveys were undertaken when the area was public land administered by the Inyo National Forest.

As discussed in the "Environmental Setting" above, the Project site and immediate vicinity have been subjected to multiple cultural resources studies. Two known resources, CA-MNO-3, which includes remnants of the "Old Mammoth" townsite, and CA-MNO-893H, the Bodle Ditch, are located within the Project site. Following is a discussion of the Project's impacts with respect to these known previously recorded cultural resources.

CA-MNO-3

The Project has the potential to impact CA-MNO-3 south of Old Mammoth Road. According to Archaeological Test Excavations (1990), the impacts to CA-MNO-3 from construction of the golf course were adequately mitigated through the testing as reported and the protection of the site with non-cultural fill. Because the site was capped with non-cultural fill, it is unlikely that the minor, Project-related changes to the golf course at the ground surface will impact the site. As such, any project-related impacts associated with alterations to the golf course to Site CA-MNO-3 would be considered ***less than significant*** under CEQA.

The Project has the potential to impact the significant prehistoric and historic components of CA-MNO-3 north of Old Mammoth Road. The portion of this site that includes the "Old Mammoth" townsite is also considered significant because it meets criterion 1 and 4 of the California Register criteria for its association with events important to regional history. Therefore, Project-related impacts to Site CA-MNO-3 in this area would be considered potentially ***significant*** under CEQA. As such, mitigation measures are recommended below that would reduce any such impacts to cultural resources to a less-than-significant level.

CA-MNO-893H, The Bodle Ditch

The Bodle Ditch system was determined not eligible for the National Register of Historic Places by the California State Historic Preservation Officer. No distinguishing characteristics that would suggest the revision of this determination were identified. Additionally, the portions of the pipeline and ditch identified outside of the Project area that are associated with the historic component of the CA-MNO-3 site is consistent with this determination. Therefore, the site would not have sufficient significance to be eligible for the California Register of Historical Resources. As such, any project-related impacts to the Bodle Ditch would be considered ***less than significant*** under CEQA.

Mitigation Measure CULT-1

For the portion of CA-MNO-3 located north of Old Mammoth Road the applicant shall implement any of the following measures to reduce the significant impact to a less than significant level:

- plan construction to avoid the site,
- deed conservation easements,
- cap the site prior to construction, or
- perform archaeological data recovery.

Impact CULT-2 Impacts to Unknown Cultural Resources

Portions of the Project site north of Old Mammoth Road are sensitive for prehistoric and historic archaeological resources, and human remains. Buried (previously unrecorded) prehistoric and historic archaeological deposits may be present within the Project site. In addition, previously unidentified features and/or diagnostic artifacts within previously recorded sites may be present within the Project site. Ground-disturbing construction associated with the Project has the potential to result in ***significant*** impacts to unknown cultural resources. As such, mitigation measures are recommended below that would reduce any such impacts to unknown cultural resources to a less-than-significant level.

Mitigation Measure CULT-2a

A Mitigation Monitoring and Reporting Plan (MMRP) shall be prepared by a qualified archaeologist prior to Project construction for the portion of the Project site north of Old Mammoth Road. The MMRP shall outline the protocol for notification, temporary protection, documentation, and evaluation of previously unrecorded cultural resources encountered during construction, as well as mitigation of project-related impacts to any such resources that are considered significant under CEQA, and the curation of any artifacts or samples collected in the field. The MMRP shall include a sample data recovery plan and a curation agreement. This document shall be completed prior to commencement of any ground-disturbing activity associated with the Project site (including clearing, brushing, grubbing, vegetation removal, disking, grading, trenching, excavation, and/or boring).

Mitigation Measure CULT-2b

A qualified archaeologist shall monitor all ground-disturbing construction in native soils for the portion of the Project site north of Old Mammoth Road. (Construction work within stockpile material does not require monitoring.) The construction monitor shall be supplied with maps and site records for the previously recorded cultural resources within the Project site, so that she/he can distinguish new resources from those that have been previously recorded and evaluated. The monitor shall prepare a daily monitoring log recording the type of work monitored, soil conditions, discoveries, and general observations.

Mitigation Measure CULT-2c

Previously unknown cultural resources identified during Project construction shall be protected through temporary redirection of work and possibly other methods such as fencing (to be outlined in the MMRP) until formally evaluated for significance under CEQA. In the event that previously unrecorded cultural resources are exposed during construction, the monitor shall be empowered to temporarily halt construction in the immediate vicinity of the discovery while it is documented and evaluated for significance. Construction activities may continue in other areas. If the discovery is evaluated as significant under CEQA, additional work such as data recovery excavation may be warranted to mitigate project-related impacts to a less-than-significant level.

Mitigation Measure CULT-2d

Procedures of conduct following the discovery of human remains have been mandated by Health and Safety Code §7050.5, Public Resources Code §5097.98 and the California Code of Regulations §15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Mono County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner shall notify the NAHC within 24 hours, who will, in turn,

notify the person the NAHC identifies as the most likely descendent (MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 24 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 24 hours, the owner shall, with appropriate dignity, re-intern the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.

Mitigation Measure CULT-2e

A monitoring report shall be prepared upon completion of construction monitoring, summarizing the results of the monitoring effort. Site records for any newly recorded or updated cultural resources shall be appended to the monitoring report.

Mitigation Measure CULT-2f

Artifacts or samples collected during the course of construction monitoring and any testing or data recovery associated with newly discovered resources shall be curated in perpetuity in an appropriate facility upon completion of analysis and processing.

CUMULATIVE IMPACTS

Impact CULT-3

Implementation of the Project in combination with the related projects would result in the development of additional low- to high-density residential, commercial, institutional, public resort, and industrial land uses. Impacts to cultural resources (including historic, archaeological, and paleontological resources, as well as human remains) tend to be site-specific and are assessed on a site-by-site basis. The extent of the cultural resources (if any) that occur at the related project sites is generally unknown and, as such, it is not known whether any of the related projects would result in significant impacts to cultural resources. However, similar to the Project, such determinations would be made on a case-by-case basis and, if necessary, the applicants of the related projects would be required to implement the appropriate mitigation measures. Furthermore, the analysis of the Project's impacts to cultural resources concluded that, through the implementation of the mitigation measures recommended above, project-related impacts to cultural resources would be less than significant. Therefore, the Project would not contribute to any potential cumulative impacts, and cumulative impacts to cultural resources would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the implementation of the mitigation measures recommended above, the Project's impacts to cultural resources would be reduced to ***less-than-significant*** levels.

IV. ENVIRONMENTAL IMPACT ANALYSIS
F. GEOLOGY/SOILS

INTRODUCTION

The information and analysis in this section is based primarily on the following report, which is included in Appendix F of this EIR:

- Preliminary Geotechnical Investigation – Snowcreek 8 Development, Mammoth Lakes, California prepared by Sierra Geotechnical Services Inc., October 4, 2006.
- Third Party Geotechnical Peer Review of the Preliminary Geotechnical Investigation – Snowcreek 8 Development, Mammoth Lakes, California prepared by Sierra Geotechnical Services Inc., October 4, 2006. by Treadwell & Rollo, Inc., January 19, 2007.

ENVIRONMENTAL SETTING

Regional Geology and Soils

The Project site is located at the southwestern edge of the Long Valley caldera near the eastern flank of the Sierra Nevada Mountain Range (Sierra Nevada). A caldera is a large, usually circular depression at the summit of a volcano formed when magma, a molten material beneath or within the earth's crust, is withdrawn or erupted from a shallow underground magma reservoir. The removal of large volumes of magma may result in loss of structural support for the overlying rock, thereby leading to collapse of the ground and formation of a large depression.[1] The caldera is elongated in an east-west direction and was formed approximately 760,000 years ago. The high mountains around Mammoth Lakes constitute the caldera walls with the Glass Mountains forming the west and southwest walls and the Benton Range forming the east wall. Mammoth Mountain is a smaller dome on the rim of the caldera formed by repeated eruptions from vents on the southwest rim of the caldera 220,000 to 50,000 years ago. Bedrock below volcanic deposits in the Mammoth Lakes area is predominately Mesozoic granitic rock of the Sierra Nevada batholith. A batholith is a large emplacement of igneous intrusive (also called plutonic) rock that forms from cooled magma deep in the Earth's crust. Batholiths are almost always made mostly of felsic or intermediate rock-types, such as granite, quartz monzonite, or diorite.[2] The batholith is a series of intrusions that displaced overlying ancient sedimentary sea floor rocks during the Jurassic and Cretaceous Periods. During the past 3,000 years, Pleistocene glacial deposits (glacial till and outwash) have covered the Mesozoic bedrock and volcanic rocks throughout the area now occupied by the Town of Mammoth Lakes.

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[1] *United States Geological Survey, retrieved at http://volcanoes.usgs.gov/Products/Pglossary/caldera.html on May 8, 2006.*

[2] *Retrieved at http://en.wikipedia.org/wiki/Batholith on May 8, 2006.*

Topographic Setting

The topography of the Mammoth Lakes area ranges from rolling alluvial plains at approximately 7,200 feet above mean sea level (msl) in Long Valley to approximately 11,053 feet above msl at the summit of Mammoth Mountain. An alluvial plain is a relatively flat and gently sloping landform found at the base of a range of hills or mountains, formed by the deposition of alluvial soil over a long period of time by one or more rivers coming from the mountains. In general, alluvial material consists of loose to medium dense, moist sand, silty sand, and clayey sand with cobble, boulders, and a moderate amount of roots. The slope gradients range from relatively flat areas in Sherwin Meadow and Long Valley to slopes of 50 percent or greater on Mammoth Mountain.

Volcanic Setting

The Mono Lake Long Valley area is volcanically active with over 30 known events occurring in the past 2,000 years. Most recently, in 1890, a pyretic type eruption (steam, water, mud and other gases, as a result of magma heating groundwater) occurred 35 miles north of the Town beneath the southern portion of Mono Lake. Another eruption in the area is likely to occur within the next thousand years.[3] The United States Geological Survey (USGS) estimates that eruptions at the Mono-Inyo Craters volcanic field have historically occurred at approximately 500-year intervals over the past 2,000 to 3,000 years. The most recent eruption in the region was at Mono Lake between 1720 and 1850. A dome grew on the lake floor and emerged to make Paoha Island.

High magnitude seismic activity in May 1980 (four magnitude six events over a two-day period) indicated a new phase of magmatic activity and heightened potential for volcanic activity in the area. Volcanologists interpreted the earthquakes, accompanying ground deformations, and an increase in activity at fumaroles (a hole in a volcanic area from which hot smoke and gases escape) as an indication of magma movement beneath the caldera. Frequent low magnitude seismic activity since that time indicates deep magmatic movement.

Carbon Dioxide

Following a period of earthquakes beneath Mammoth Mountain in 1989, magmatic gases (high levels of carbon dioxide in the soil) were determined to be killing approximately 120 acres of trees in certain portions of the caldera in 1990. Most notably, between 50 and 150 tons of carbon dioxide gas are emitted daily at the north end of Horseshoe Lake where approximately 30 acres of trees have been killed.[4] Additional areas of carbon dioxide discharge are scattered around Mammoth Mountain primarily outside of the Mammoth Mountain Ski Area. Winter closures are implemented in a few small areas within the Mammoth Mountain Ski Area where carbon dioxide concentrations are potentially dangerous. Areas of

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[3] *Retrieved at http://en.wikipedia.org/wiki/Batholith on May 8, 2006.*

[4] *Horseshoe Lake and Vicinity CO2 Phenomenon, USDA Forest Service, January 28, 2000.*

discharge are also located outside of the established trails of Tamarack Cross-Country Ski Center. There is no indication that the area of carbon dioxide discharge has increased since 1995.[5]

The source of the carbon dioxide is a large gas reservoir located deep underground related to long-term magmatic degassing beneath Mammoth Mountain. Because carbon dioxide is heavier than air, the USGS indicates that carbon dioxide gas can accumulate in snowbanks, depressions, and poorly ventilated enclosures, including structures, posing a potential danger to people. Concentrations are highly variable depending on wind and weather conditions. USGS scientists closely monitor the volcanic activity in the region in order to provide the public with reliable and timely warning of volcanic unrest within the Long Valley area.

Site Geology and Soils

Site Topography

Overall topography on the Project site is characterized by both relatively flat and shallow sloping hillside terrain, with elevations ranging between 7,835 and 7,930-feet above sea level. Shallow drainages flow east and northeast towards Mammoth Creek. Vegetation consists of abundant sagebrush and grasses as well as a few pine trees. Soils in the vicinity of the Project site include undocumented fill, topsoil/alluvium, and glacial till deposits. These soils are described below.

Undocumented Fill

Up to seven feet of undocumented fill was encountered in various test pits drilled on the Project site. The undocumented fill generally consisted of fine to coarse, moist, silty to clayey sand with a abundant cobbles and boulders with maximum dimensions of 36 inches.

Topsoil/Alluvium

The Project site contains areas of topsoil/alluvium ranging from 1½- to greater than ten-foot-thick. In general, the topsoil/alluvium layer consists of loose to medium dense, moist sand, silty sand, and clayey sand with cobble, boulders, and a moderate amount of roots. In areas where the thickness of the topsoil/alluvium layer was measured, the layer is primarily overlain by undocumented fill and is underlain by glacial deposits.

Glacial Till Deposits

Glacial till deposits were encountered below the alluvium. The glacial till generally consists of medium dense to dense, moist to saturated, sand and silty sand, with gravels, cobbles, and boulders. The alluvium

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[5] *Horseshoe Lake and Vicinity CO_2 Phenomenon, USDA Forest Service, January 28, 2000.*

generally consists of loose, silty, very fine to coarse-grained sand and sand with silt, with abundant roots, rock fragments, cobbles, and boulders. Glacial till deposits were encountered below the alluvium, consisting of medium dense to dense, very fine to coarse sand and silty sand, with abundant gravels, cobbles, and boulders. The glacial till is denser at lower depths.

Groundwater

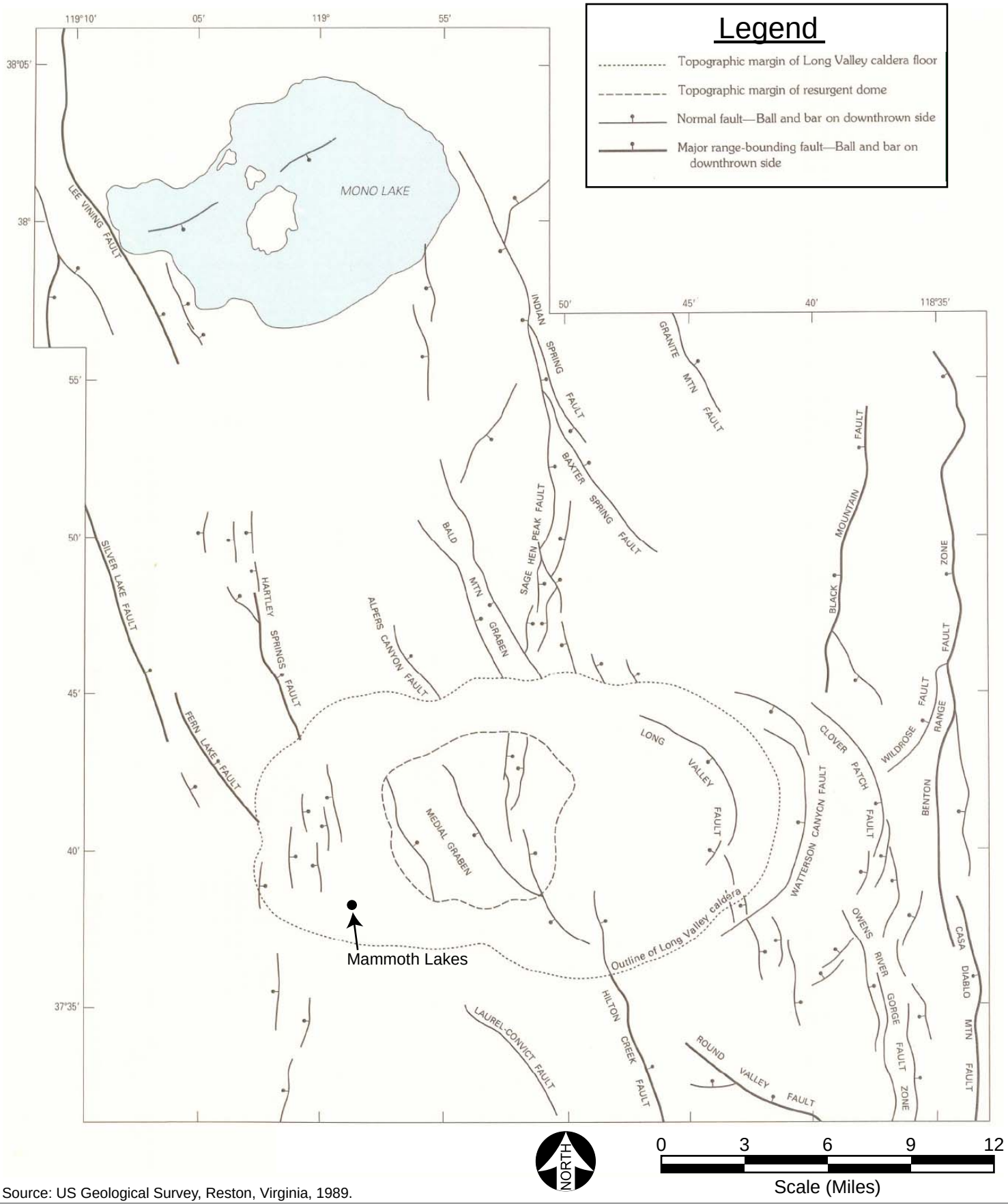
Groundwater on the Project site varies in height from two feet to 8½ feet below existing grade. Several areas contain soils indicative of high groundwater. However, groundwater conditions fluctuate seasonally and groundwater conditions may not be reflective of groundwater conditions during construction. Substrata that would retard the flow of water downward were not observed on the Project site.

Seismicity and Seismic Hazards

Earthquakes in the Mammoth Lakes area are a result of both tectonic and magmatic activity. There are several active or potentially active fault zones within 60 miles of the Town. Faults that have been active in the last 200 years include the Mono Lake, June Lake, and Hilton Creek faults in the northern extension of the Sierra Nevada Boundary fault system and main trace of the Sierra Nevada fault and the Owens Valley fault in the southern extension of the Sierra Nevada Boundary fault system. Faults that have been active during the last two million years include the Bodie Hills, White Mountains, Death Valley Furnace Creek, and Saline Valley faults. Within the vicinity of the Town, Hilton Creek, Owens Valley, Hartley Springs, Laurel Convict, Long Valley Caldera, Mono Craters Caldera, Silver Lake, and Wheeler Crest faults as well as the Chalfant Valley Fractures have the potential to induce ground shaking within the Town. The location of these faults relative to the Town is noted in Table IV.F-1 and Figure IV.F-1.

Table IV.F-1
Regional Faults and Seismicity

Fault Segment	Approximate Distance from Project Site (km)	Direction from Project Site	Maximum Magnitude
Hartley Springs	1.1	West	6.6
Hilton Creek	10	East	6.7
Round Valley	21	East	7.0
Mono Lake	36	North	6.6
Fish Slough	50	East	6.6
White Mountains	52	East	7.1
Robinson Creek	71	Northwest	6.4
Death Valley (N. of Cucamonga)	72	East	7.0
Owens Valley	71	Southeast	7.6
Birch Creek	77	Southeast	6.4
Deep Springs	92	East	6.6
Source: Treadwell & Rollo, 2007.			



Source: US Geological Survey, Reston, Virginia, 1989.

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Environmental Planning and Research

Figure IV.F-1
Regional Seismicity Map

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Ground Motion

Ground motion is generated during an earthquake as two blocks of the Earth's crust slip past each other. In general, ground motion is greatest near the epicenter, increases with increasing magnitude, and decreases with increasing distance. However, the ground motion measured at a given site is influenced by a number of criteria, including depth of the epicenter, proximity to the projected or actual fault rupture, fault mechanism, duration of shaking, local geologic structure, source direction of the earthquake, underlying earth material, and topography.

Earthquake magnitude is a quantitative measure of the strength of an earthquake or the strain energy released by it, as determined by seismographic or geologic observations. Earthquake intensity is a qualitative measure of the effects a given earthquake has on people, structures or objects. Earthquake magnitude is measured on the Richter scale or as moment magnitude, and intensity is described by the Modified Mercalli intensity scale. A related form of measurement is peak ground acceleration, which is a measure of ground-shaking during an earthquake. Peak ground acceleration values are reported in units of gravity (g). Structures founded on thick soft soil deposits are more likely to experience more destructive shaking, with higher amplitude and lower frequency, than structures founded on bedrock. In addition, thick soft soil deposits far distances from earthquake epicenters may result in seismic accelerations significantly greater than expected in bedrock.

At the Project site, the estimated peak horizontal ground acceleration with a ten percent probability of exceedance in 100 years is 0.44g and the estimated peak horizontal ground acceleration with a ten percent probability of exceedance in 50 years is 0.35g. Due to the proximity of the site to the Hartley Springs fault, the potential for very strong ground shaking within the Project area is considered high.[6]

Fault Rupture

Ground surface rupture results when the movement along a fault is sufficient to create a gap or break along the upper edge of the fault zone at the surface. The Project area is not located within either an Earthquake Fault Zone or Alquist-Priolo Hazard Zone. Therefore, the potential for fault rupture within the Project area is considered to be low.[7]

Soil Lurching

Soil lurching refers to the rolling motion on the ground surface caused by the passage of seismic surface waves. Soil lurching is likely to be most severe where the thickness of soft sediments varies to a noticeable degree under structures. The potential for soil lurching on the site is considered low to

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[6] *Geotechnical/Geologic Consultation Peer Review for the Snowcreek Master Plan EIR, Snowcreek 8 Project, Mammoth Lakes, California prepared by Treadwell and Rollo, January 17, 2007.*

[7] *Ibid.*

moderate due to the existence of potentially compressible soils within the upper few feet of material below existing grades.

Liquefaction and Settlement

Soil liquefaction, the condition in which soils below the groundwater table temporarily lose their solid state, results from loss of strength during cyclic loading, such as that imposed by earthquakes. When seismic ground-shaking occurs, the soil is subject to seismic shear stresses that may cause the soil to undergo deformations or changed appearance. If the soil undergoes virtually unlimited deformation without developing significant resistance, it is said to have liquefied or made into liquid. When soils consolidate during and following liquefaction, ground settlement occurs. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands. Shallow groundwater is considered a factor as it creates the saturated condition of the soil.

The Project site contains areas with up to seven feet of fine to coarse dense undocumented fill at a few locations, topsoil/alluvial deposits consisting of loose sand and silty sand blanket the site between the depths of approximately 1½ -to ten feet, and the potential for perched water to develop at the site. In areas where loose to medium dense fill, topsoil, and/or alluvium are greater than approximately 3 to 4 feet thick, and loose to medium dense soil is left in place, water may become perched beneath the proposed building sites and the potential for soil liquefaction may exist. Ground failures associated with soil liquefaction include post-liquefaction reconsolidation, lateral spreading, and loss of bearing support. Liquefaction-induced lateral spreading is the lateral or sideways movement of gently sloping ground as a result of liquefaction in a shallow underlying deposit during an earthquake and is described in more detail below.

Portions of the shallow granular soils on the Project site may be loose and susceptible to settlement. During a major earthquake on a nearby portion of one of the active faults, strong ground shaking may occur and cause the loose, unsaturated portion of the topsoil/alluvial deposit to densify and settle. Preliminarily estimates show that up to 1/2 inch of settlement may occur at the site. Therefore, settlement should be considered a potential minor hazard at the Project site.

Landslides, Avalanches, and Slope Instabilities

Avalanches and landslides can occur as a result of moderate to large earthquakes, which can cause rock and snow to move vertically and laterally downslope. These hazards typically affect structures which are located at the base of slopes or within close proximity to the area of flow. Steep slopes, shallow soil development, excess water, and lack of shear strength in the area result in slope instabilities including landslides, earthslips, mudflows, and soil creeps. Seismic activity induces some landslides but most slides result from the weight of rain saturated soil and rock exceeding the shear strength of the underlying material.

The potential for avalanches and landslides is considered low because the Project site is not adjacent to the base of a steep slope or within close proximity to an area of avalanche flow.

Seiches and Tsunamis

A seiche is a wave that oscillates in lakes, bays, or gulfs from a few minutes to a few hours as a result of seismic or atmospheric disturbances. A tsunami is a very large ocean wave caused by an underwater earthquake or volcanic eruption. The potential for seiches and tsunamis are considered nil because there are no large bodies of water in close proximity to the site.

Volcanic Hazards

Massive eruptions are extremely rare and currently there is no evidence leading to the conclusion that a massive eruption near the Project site is eminent. Small to moderate volcanic eruptions could occur resulting in pyroclastic flows and surges, as well as volcanic ash and pumice fallout, which could impact the site. However, the odds of an eruption that could impact the Project site are roughly 1 to 1,000 in a given year.

Lateral Spreading

As previously mentioned, lateral spreading typically occurs as the movement or stretching of relatively flat-lying alluvial material toward an open or "free" face such as an open body of water, channel, or excavation. In general, alluvial material consists of loose to medium dense, moist sand, silty sand, and clayey sand with cobble, boulders, and a moderate amount of roots. Generally in soils, this movement or lateral spreading is due to failure along a weak flat and/or level surface, and may often be associated with liquefaction, the process of firm soil being converted into a liquid state. As cracks develop within the weakened or failing material, blocks of soil displace laterally or spread out toward the open area. Cracking and lateral movement or spreading may gradually spread away from the face as blocks continue to break free. Lateral spreading can occur within areas having potential for liquefaction. Therefore, since it has been determined that the soils at the Project site have the potential to liquefy or turn to liquid during a seismic event, there is therefore the potential for lateral spreading to also occur during seismic events.

Expansive Soils

No expansive soils have been mapped or encountered in the Town of Mammoth Lakes.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the *CEQA Guidelines*, the Project could have a significant environmental impact if it would:

(a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.

(ii) Strong seismic ground shaking.

(iii) Seismic-related ground failure, including liquefaction.

(iv) Landslides.

(b) Result in substantial soil erosion or the loss of topsoil.

(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

(d) Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2001), creating substantial risks to life or property.

(e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Project Impacts and Mitigation Measures

Impact GEO-1 Fault Rupture

As noted, the Project site is not located within either Earthquake Fault Zones or Alquist-Priolo Hazard Zones and the potential for fault rupture is considered to be low. Therefore, Project impacts related to fault rupture would be ***less than significant*** and no mitigation measures are required.

Impact GEO-2 Strong Seismic Ground Shaking

The Project site is located in a Seismic Zone 4 based on 1997 Uniform Building Code (UBC) and 2001 California Building Code (CBC). Additionally, the Project site would follow the Town's Municipal Code 15.24.020 Seismic design-Uniform Building Code-Section 2333(b). During the service life of the Project, the site is likely to experience at least one earthquake that may produce potentially damaging ground shaking. As noted, the probabilistic seismic hazard analysis estimates peak horizontal ground acceleration with a 10 percent probability of exceedance in 100 years is 0.44 gravity (g) and the estimated peak horizontal ground acceleration with a 10 percent probability of exceedance in 50 years is 0.35g. However, the Project applicant would be required to design and construct the Project in conformance to

the most recently adopted CBC design parameters as shown in Table IV.F-2 and the Town's Municipal Code for seismic design.

Table IV.F-2
Seismic Design Parameters

Seismic Parameter	Recommended Value
Soil Profile Type	S_C
Seismic Zone Factor	0.4
Seismic Source Type	B
Near Source Factor N_a	1.3
Near Source Factor N_v	1.6
Seismic Coefficient C_a	0.57
Seismic Coefficient C_v	1.02
Source: Sierra Geotechnical Services, Inc., 2007.	

The State earthquake protection law (California Health and Safety Code 19100 et seq.) requires that structures be designed to resist stresses produced by lateral forces caused by wind and earthquakes. Specific minimum seismic safety and structural design requirements are set forth in Chapter 16 of the Uniform Building Code (UBC) and the California Building Code (CBC) as well. The UBC/CBC identifies seismic factors that must be considered in structural design. The Town's Municipal 15.24.020 for seismic design states one third of the design snow load shall be assessed to the deadload seismic design. While there are no absolute guarantees when considering acts of nature such as earthquakes, the building requirements previously discussed have been designed to reduce the likelihood of damage as a result of ground shaking. Therefore, conformance with current UBC/CBC requirements, as well as the Town's seismic design requirements would reduce the potential for structures on the Project site to sustain damage during an earthquake event, and Project impacts related to ground shaking would be ***less than significant*** and no mitigation measures are required.

Impact GEO-3 Liquefaction and Soil Instabilities

Geotechnical investigation on the Project site indicates that: 1) up to seven feet of fine to coarse dense undocumented fill is present at a few locations, 2) topsoil/alluvial deposits consisting of loose sand and silty sand blanket the site between the depths of approximately 1-1/2 to 10 feet, and 3) perched water may develop at the site.

In general the potential for soil liquefaction is low where dense fill, topsoil and/or alluvium are less than approximately three to four feet thick and these "unsuitable" bearing materials would be excavated and replaced with well-compacted engineered fill,. However, portions of the Project site contain areas of fill and topsoil/alluvium up to seven feet in depth located from 1½ feet to greater than ten feet below the ground surface areas. Groundwater was encountered at depths ranging between 2½ to 8½ feet below the ground surface. The sandy fill and topsoil/alluvium materials are generally characterized as loose to medium dense. During the late spring or early summer, the local groundwater level is likely to rise and

the lower portions of the loose to medium dense sandy fill and topsoil/alluvium layers may become saturated. Strong ground shaking associated with a large earthquake on a nearby fault could trigger soil liquefaction and associated ground failures. Ground failures associated with soil liquefaction include post-liquefaction reconsolidation, lateral spreading, and loss of bearing support. Impacts would be ***significant***.

Soil erosion/loss of topsoil may occur during grading and earthwork on the Project site. Geotechnical investigation recommends removal of unsuitable bearing materials from the Project site where new improvements or new fills are planned and replaced with well compacted engineered fill. Unsuitable materials include loose or disturbed soils, undocumented fills and contaminated soils. As noted, undocumented fill and loose topsoil/alluvium are located on the Project site with approximate depth maximums of seven feet and ten feet below the grounds surface.[8] Therefore, removal of these soils may cause a ***significant*** impact.

Mitigation Measure GEO-3a Liquefaction and Soil Instabilities

Prior to issuance of building permits and grading activities, a design level geotechnical report shall be prepared and all recommendations in the report shall be adhered to. The design-level geotechnical report shall evaluate the potential for localized liquefaction by performing supplemental subsurface exploration (to evaluate the thickness, in place density, fines content of the underlying loose to medium soil and gradation), laboratory testing, and engineering analysis.

Mitigation Measure GEO-3b Liquefaction and Soil Instabilities

Implement all recommendations contained within these site-specific geotechnical reports, including those pertaining to site preparation, excavation, fill placement and compaction; foundations; concrete slabs-on-grade; pavement design; lateral earth pressures and resistance; and surface drainage control.

Mitigation Measure GEO-3c Liquefaction and Soil Instabilities

The final grading, drainage, and foundation plans and specifications shall be prepared and/or reviewed and approved by a Registered Geotechnical Engineer and Registered Engineering Geologist. In addition, upon completion of construction activities, the Project applicant shall provide a final statement indicating whether the work was performed in accordance with Project plans and specifications and with the recommendations of the Registered Geotechnical Engineer and Registered Engineering Geologist.

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[8] *Treadwell and Rollo's Third Party Geotechnical and Geological Review, January 19, 2007.*

Impact GEO-4 Cyclic Densification

Cyclic soil densification is a phenomenon in which non-saturated, cohesionless soil is densified by earthquake vibrations, resulting in ground surface settlement. Cyclic densification should be considered a potential minor hazard at the Project site. During a major earthquake on a nearby portion of one of the active faults, strong ground shaking may cause the loose, unsaturated alluvial soil to densify and settle. It is estimated that up to ½ inch of cyclic densification may occur at the site. This may result in the minor surface improvements, such as minor cracking of foundations. ,Minor cracks in foundation and other minor surface improvements would not have the potential to represent a substantial risk to life and property. Furthermore, as noted, prior to issuance of building permits and grading activities, a design level geotechnical report shall be prepared and all recommendations in the report shall be adhered to. Therefore, cyclic densification does not represent a significant impact under CEQA. Impacts would be less than significant and no mitigation measures are required.

Impact GEO-5 Landslides and Avalanches

The potential for rock falls or snow avalanches to occur on the Project site is considered low because the site is not adjacent to the base of a steep slope or within close proximity to an area of avalanche flow.[9] Furthermore, no evidence of past landslides has been observed. Therefore, Project impacts related to landslides and avalanches would be ***less than significant*** and no mitigation measures are required.

Impact GEO-6 Volcanic Activity

A small to moderate volcanic eruption could occur somewhere along the Mono-Inyo Craters volcanic chain producing pyroclastic flows and surges as well as volcanic ash and pumice fallout that could significantly impact the Project site. Although this risk is present throughout the Town and surrounding areas, Project impacts related to volcanic activity would be ***significant***.

Mitigation Measure GEO-6 Volcanic Activity

The Project applicant shall prepare an emergency evacuation plan in consultation with the Town in order to provide for the orderly evacuation of the Project site in case the potential for volcanic hazards increases and residents need to vacate the Project site.

Impact GEO-7 Carbon Dioxide

As previously noted, high concentrations of carbon dioxide are located within isolated areas of the Town, prominently Horseshoe Lake. Carbon dioxide poses a health risk when collected at high concentrations in lower parts of depressions and enclosures. However, once the carbon dioxide is able to disperse within

[9] *Treadwell and Rollo's Third Party Geotechnical and Geological Review, January 19, 2007.*

the atmosphere, there is no longer a health risk. The Project site is located approximately two an half miles from the closest isolated area of high carbon dioxide concentrations, as such the carbon dioxide would disperse before arriving at the Project site.[10] The Project site is not located in an area associated with high levels of carbon dioxide. Therefore, impacts would be ***less than significant*** and no mitigation measures are required.

Impact GEO-8 Soil Erosion/Loss of Topsoil

The Project site would require grading and earthwork and would be subject to soil erosion and loss of topsoil. Removal of unsuitable soils from all building locations shall extend below the unsuitable material and to a minimum horizontal distance of one-half the footing width or five feet (whichever is greater) horizontally outside the footing footprint. Furthermore, paved roadways and parking areas are recommended a removal of one to three feet.[11] Additionally, erosion and loss of topsoil is possible surrounding the structures if left unprotected during the snowmelt season. Without proper implementation of erosion control measures during construction and operation of the Project, the site could sustain soil erosion and loss of topsoil. This would be considered a ***significant*** impact.

Mitigation Measure GEO-8

The following measures shall be implemented to prevent soil erosion and loss of topsoil:

- A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared with the grading plans to fulfill regulatory requirements.
- Permanent erosion control measures shall be placed on all graded slopes. No graded areas shall be left unstabilized between October 15th and April 15th.
- Finish grading for all building areas shall allow for all drainage water from the building area to drain away from building foundations (two percent minimum grade on soil or sod for a distance of five feet). Ponding of water shall not be permitted.

Impact GEO-9 Expansive Soils

Expansive soils contain clay minerals that attract and absorb water. The soils swell when subjected to moisture, causing structural problems through differential movement. As noted, the Project site consists of silty to clayey, very fine to coarse grained soils which are not considered expansive soils. Therefore, no expansive soils have been mapped or encountered in the Town. Therefore, Project impacts related to expansive soils would be ***less than significant*** and no mitigation measures are required.

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[10] *Telephone correspondence, Joseph Adler, Principal Geologist, Sierra Geotechnical Services, Inc., CAJA staff, July 10, 2007.*

[11] *Treadwell and Rollo's Third Party Geotechnical and Geological Review, January 19, 2007.*

Impact GEO-10 Septic Tanks or Alternative Waste Water Disposal Systems

No septic tanks or alternative waster water disposal systems are proposed as part of the Project. Therefore, Project impacts related to soils incapable of supporting these uses would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact GEO-11 Cumulative Impacts

Geotechnical impacts related to future development in the Town would involve hazards associated with site-specific soil conditions, including erosion, volcanic activity, and ground-shaking during earthquakes. The Project would incorporate Best Management Practices (including the preparation of a SWPPP) that would reduce or eliminate impacts from erosion. Although the Project would result in the addition of people to the Project area, the risk of seismic shaking would be no greater than other areas of the Town of Mammoth Lakes. The impacts on each site would be specific to that site and its users and would not be common or contribute to (or shared with, in an additive sense) the impacts on other sites. In addition, all development on the Project site would be subject to uniform site development and construction standards that are designed to protect public safety. Therefore, cumulative geology and soil impacts would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the mitigation measures listed above and compliance with applicable regulations would reduce all Project impacts related to geology and soils to a ***less-than-significant*** level.

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IV. ENVIRONMENTAL IMPACT ANALYSIS
G. HYDROLOGY AND WATER QUALITY

INTRODUCTION

This section of the Draft Environmental Impact Report (Draft EIR) provides a description of the surface water and groundwater resources on the proposed Project site, information on regulations that serve to protect these resources, an assessment of the potential impacts of the proposed Project on these resources, and recommended measures to mitigate potentially significant impacts on these resources. A technical report was prepared to analyze the potential surface water and groundwater hydrology and water quality impacts associated with the Project. This technical report is summarized in the section below and included in Appendix G of this Draft EIR. Additional technical reports prepared to analyze the biological resources at the Project site were also utilized in the preparation of this section and are included in Appendix D of this Draft EIR.

BACKGROUND AND METHODS

The information and analysis in this section (except where footnoted otherwise or described below) is based on the *Snowcreek VIII, Mammoth Lakes, Mono County, California Preliminary Drainage Study, March 2007* prepared by Triad/Holmes Associates.

This Drainage Study, which is incorporated herein by this reference, is included as Appendix G to this Draft EIR. In addition, the following reports prepared for the evaluation of biological resources at the Project site were utilized in the preparation of this section and are included in Appendix D to this Draft EIR: *Hilltop Site Snow Creek Area 7 Wetland Delineation Report, August 2005* by Resource Concepts, Incorporated and *Identification/Delineation of Wetlands on a Portion of the Snowcreek Resort Property in Mammoth Lakes (Mono County), California, June 27, 2002* by D. R. Sanders and Associates, Incorporated.

ENVIRONMENTAL SETTING

The Project site is located in the Town of Mammoth Lakes (Town), Mono County, California. The Town is located on the eastern slopes of the Sierra Nevada at an elevation of approximately 7,900 feet above sea level within Section 34, Township 3 South, Range 27 East. The Town is located approximately 168 miles south of Reno, Nevada, and approximately 310 miles north of Los Angeles, California. Neighboring communities of the Town include June Lake to the northwest, Benton to the east, and Tom's Place to the southeast (refer to Figure II-1 and Figure II-2). Regional access is provided by US Highway 395 and California State Highway 203. Major roadways which provide access to the site include Minaret Road to the north and Old Mammoth Road to the north and west.

The Project site is bordered on the south and east by United States Forest Service (USFS) land and on the north across Old Mammoth Road by undeveloped land. The Project site is located directly to the east of

the existing nine-hole Snowcreek Golf course, to the south of Mammoth Creek, north east of Snowcreek V, and is bordered on the east by Sherwin Creek Road.

Surface Hydrology

Regional

The Town is located within the 71-square mile Mammoth Basin, a drainage area on the eastern slope of the Sierra Nevada that is tributary to the Great Basin, a large hydrologic/geographic region encompassing portions of California, Nevada, Utah, Idaho, and Oregon. Drainage to the Great Basin does not reach the ocean but instead evaporates or percolates to groundwater in a series of "sinks" or lakes.

The Mammoth Basin (Basin) delivers surface and groundwater to Mammoth Creek/Hot Creek, which is tributary to the Owens River. Mammoth Creek and Hot Creek are different names for the same stream with the division in nomenclature occurring where US Highway 395 crosses the stream to the southeast of Town. The Owens River ultimately terminates at Owens Lake, a dry "sink"/evaporation basin located at the southern end of the Owens Valley, approximately 125 miles southeast of the Town. The watershed boundaries of the Mammoth Basin consist of the Mammoth Crest divide on the Sierra Nevada crest to the west and south, the Dry Creek drainage divide on the north, and the Convict Creek drainage divide on the east. The general trend of the Basin is to the southeast, with elevations ranging from approximately 11,600 feet above sea level (asl) on the Mammoth Crest to the southwest of Town to approximately 7,000 feet asl at the confluence of Hot Creek and the Owens River to the southeast of Town. The total flow length of the Mammoth Creek/Hot Creek drainage is approximately 18 miles.[1]

The Mammoth Basin includes a system of lakes and interconnecting surface streams in its upper elevations, all of which are eventually tributary either by surface flow or underground flow to Mammoth Creek. Within or proximate to the Town, a total of five sub-watersheds are tributary to Mammoth Creek: the Lake Mary Basin, Old Mammoth, Murphy Gulch, Sherwin Creek, and Casa Diablo.[2]

Local

The Project site is located within the Sherwin Creek sub-watershed within the Town. The Project site consists of undeveloped, natural areas and landscaped areas. Overall topography on the Project site is characterized by both relatively flat and shallow sloping hillside terrain, with elevations ranging between 7,835 and 7,930-feet asl. Shallow drainages flow east and northeast towards Mammoth Creek. Vegetation consists of abundant sagebrush and grasses as well as a few pine trees. The terrain steeply climbs to the ridge south of the Project site at an approximate rate of 21 percent. Soil types are "B" and "D" as defined in the Town of Mammoth Lakes Design Manual.

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[1] *Town of Mammoth Lakes Storm Drain Master Plan Update (90% Draft), January 17, 2005, Page 2.*

[2] *Ibid, Page 5.*

Drainage areas for the Project site are shown in Figure IV.G-1. The existing drainage pond and proposed drainage ponds are shown in Figure IV.G-2. Currently, stormwater runoff from the section of the Project site located to the south of Old Mammoth Road (Areas A, B, C, and E) is collected in the existing golf course lakes. Under most conditions, runoff is contained in these lakes and does not exit. However, when spring runoff flows are high enough and during significant storms, a portion of the runoff from Areas A, B, C, and E may travel in a northeasterly direction via sheet flow across natural porous dirt areas with scattered vegetation and rocks to an existing culvert under Sherwin Creek Road. From the outlet of this existing culvert, this excess runoff is conveyed in a natural channel for approximately 200 feet until it outlets into Mammoth Creek. Stormwater from Area F, the southerly portion of the proposed golf course expansion, travels approximately 3,000 feet on a relatively flat gradient in a northwesterly direction through porous soils with scattered vegetation and rocks in the general direction towards Mammoth Creek. There is no apparent channelization of this runoff or signs of runoff draining to Mammoth Creek from this area. Under most conditions, this runoff infiltrates to the soil prior to reaching Mammoth Creek. Area D, the portion of the Project site north of Old Mammoth Road, is located adjacent to Mammoth Creek. With the exception of high spring runoff events and times of significant storms, runoff generally infiltrates into the ground without concentrating and running off-site into Mammoth Creek. There is no 100-year flood zone south of Old Mammoth Road and west of Sherwin Creek Road where most of the Project site is located. The small portion of the Project site located north of Old Mammoth Road is affected by the 100-year flood zone. A detail of the flood zone limits for the portion of the Project north of Old Mammoth Road and west of Minaret Road is shown in Figure IV.G-3.

Groundwater Hydrology

The Mammoth Basin is located within the Long Valley Groundwater Basin. Groundwater hydrology within the Mammoth Basin generally mimics surface water hydrology, with the local and regional groundwater table sloping generally to the southeast and contributing to baseflow in the Mammoth Creek/Hot Creek system. Perched groundwater exists sporadically at shallower depths than the regional water table and is dependent upon local soil conditions. Recharge of regional groundwater is dependent upon annual precipitation, which averages approximately 25 inches within the Town itself but ranges considerably across the surface watershed (from approximately 80 inches near the Sierra Nevada crest to less than 10 inches near the watershed's outlet to the Owens River).

Throughout the Mammoth Basin, the bulk of precipitation occurs during the winter months and falls in the form of snow. As a result, groundwater recharge rates (as well as surface water streamflows) are greatest during the annual snowmelt which generally occurs between April and June, depending on the size of the snowpack. Groundwater is a key source of water supply for the Town (see Section IV.N, Utilities, of this Draft EIR for more detail). The portions of the Project site that are not currently covered with impervious surfaces (e.g., paving, structures, roadways) provide opportunities for groundwater recharge.

Groundwater on the Project site varies in height from 2 feet to 8.5 feet below existing grade. Several areas contain soils indicative of high groundwater. However, groundwater conditions fluctuate seasonally

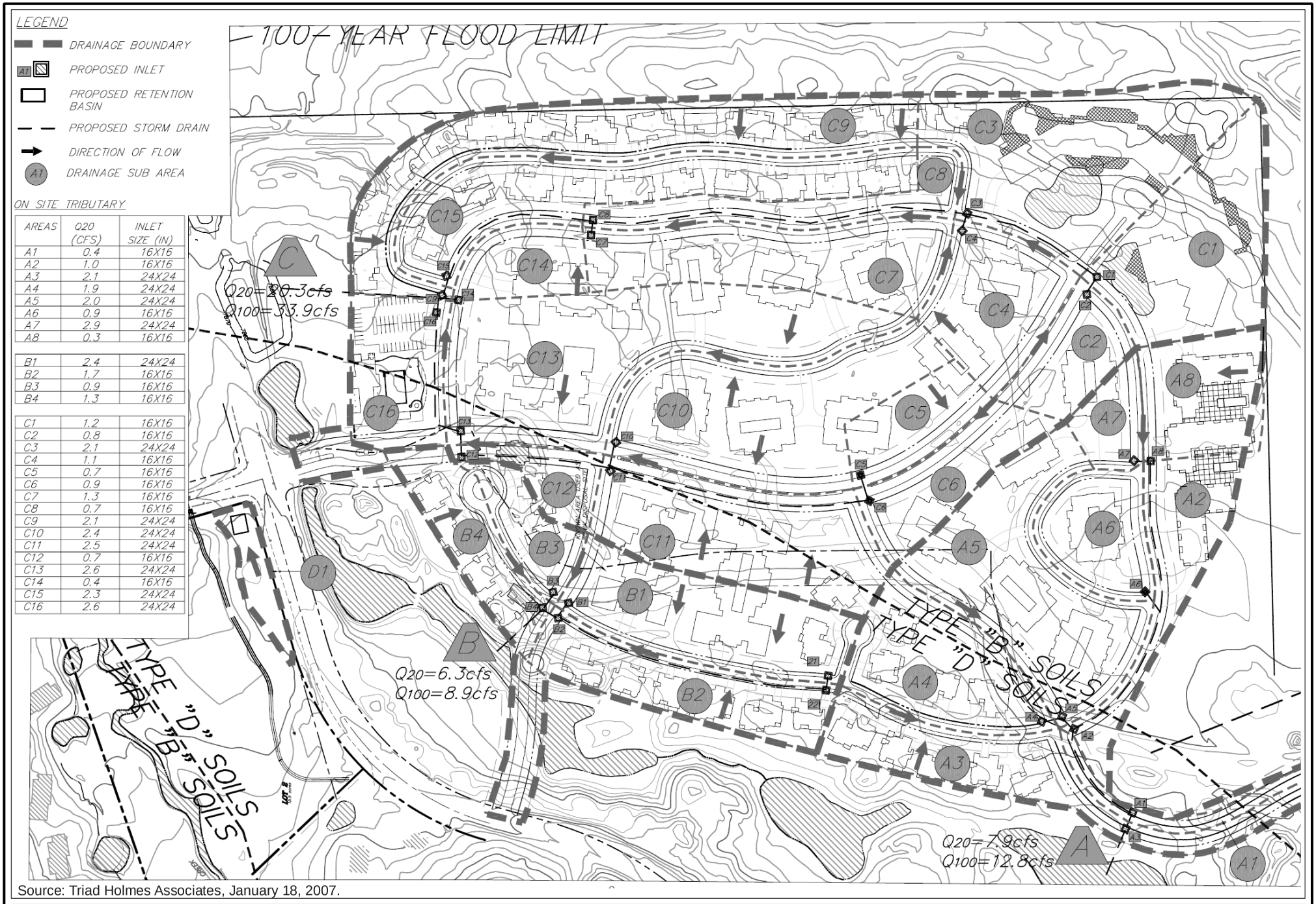
and groundwater conditions may not be reflective of groundwater conditions during construction. Substrata that would retard the flow of water downward were not observed on the site.

Jurisdictional Resources

Surface water resources determined to be "waters of the United States" are regulated by the U.S. Army Corps of Engineers (Corps) under Section 404 of the Federal Clean Water Act (CWA). In addition, surface water resources determined to be "waters of the State" are regulated by the California Regional Water Quality Control Boards (RWQCB) under the Porter-Cologne Water Quality Control Act. Such "waters" include a variety of features including streams, wetlands, and impoundments.

Two wetland delineations were prepared for the site; one for the northern portion and one for the southern portion. The northern portion of the site contains 15.89 acres and 3,330 linear feet of jurisdictional waters, including the main branch of Mammoth Creek, a side branch of Mammoth Creek, and their adjacent, emergent wetlands (Section 1). In addition, there are two excavated ponds of 0.10 and 0.07 acres (Section 1a and 1b) with a surface water connection to Section 1, which therefore are also identified as jurisdictional waters.

Jurisdictional wetland and waters studies of the southern portion of the property conducted in 2002 by Dr. Dana Sanders determined that, although the site supports hydrophytes (wetland-associated) vegetation and some areas exhibiting hydria soil indicators, no federally jurisdictional wetlands or waters are present on-site as all areas lack wetland hydrology indicators. The study concluded that the hydrophytes vegetation on-site was a remnant from previous irrigation water from the Bodle Ditch, which was eliminated in 1989, and that the site has become drier since previous site studies were conducted in 1996 and 2000. The U.S. Army Corps of Engineers determined through a review of the delineation report, site visits, and subsequent correspondence with the applicant and Dr. Sanders, that there are no wetland or water features present on-site south of Old Mammoth Road subject to federal jurisdiction. However, the southern portion of the site contains one area, the drainage outflow from the Snowcreek Golf course pond, which may still be considered "sensitive". This area may be subject to regulation by the Lahontan Regional Water Quality Control Board as "waters of the State" under the Porter-Cologne Act and/or the CDFG under Section 1600 of the Fish and Game Code Streambed and Lake Alteration Agreement Program. For additional detail on jurisdictional waters, see Section IV.D, Biological Resources, of this EIR.



Source: Triad Holmes Associates, January 18, 2007.

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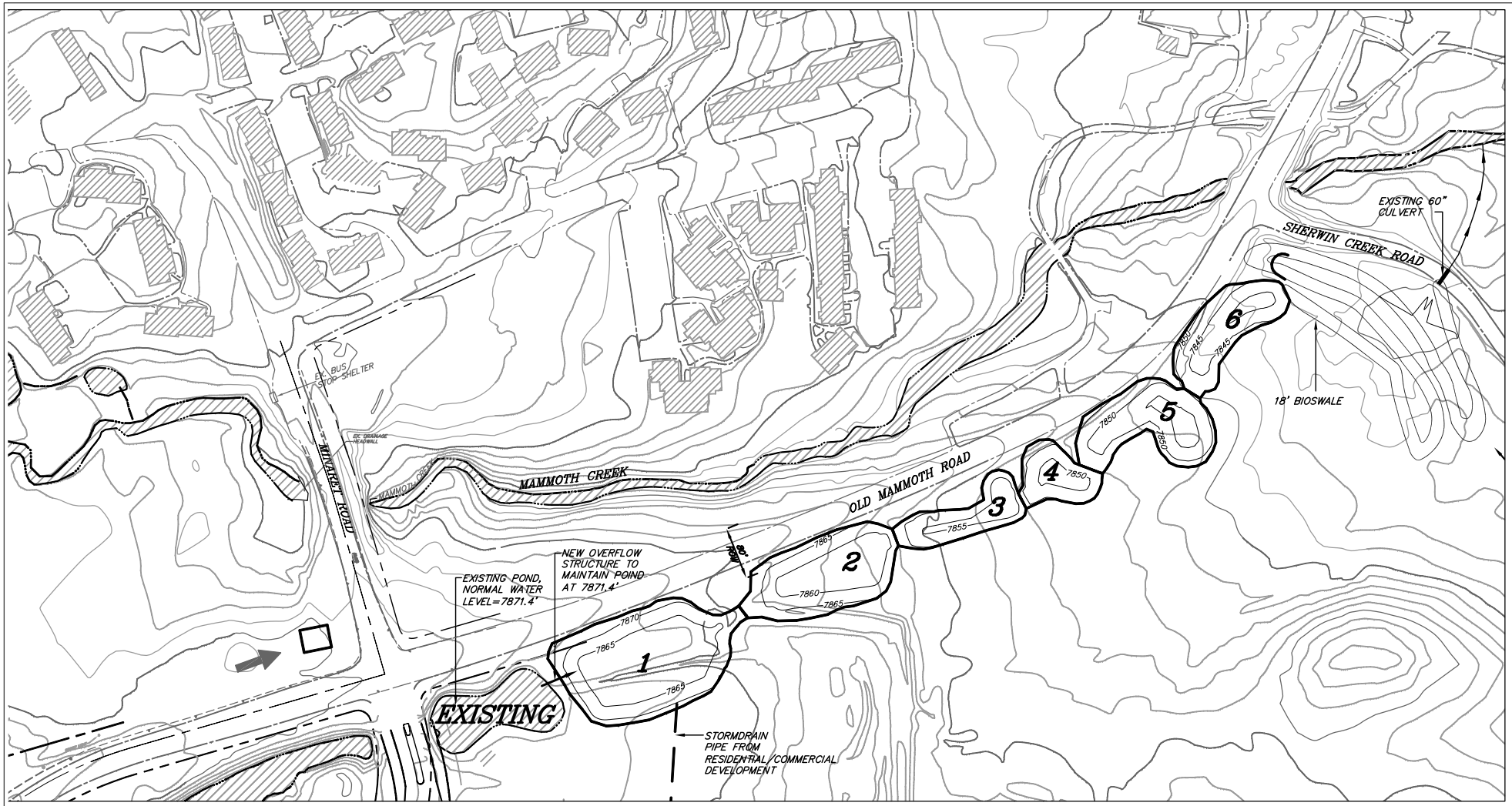
Environmental Planning and Research

NORTH

Figure IV.G-1
On Site Drainage –
Residential/Commercial Site



SPILLWAY ELEVATIONS

BASIN	ELEVATION
1	7869.0
2	7862.0
3	7856.0
4	7854.0
5	7850.0
6	7844.0

RETENTION PROVIDED

BASIN	CAPACITY (CF)
1	140,049
2	43,038
3	8,235
4	18,495
5	35,451
6	17,172
EXISTING	71,199
TOTAL	333,639 (12,357 CY)

Source: Triad Holmes Associates, January 18, 2007.

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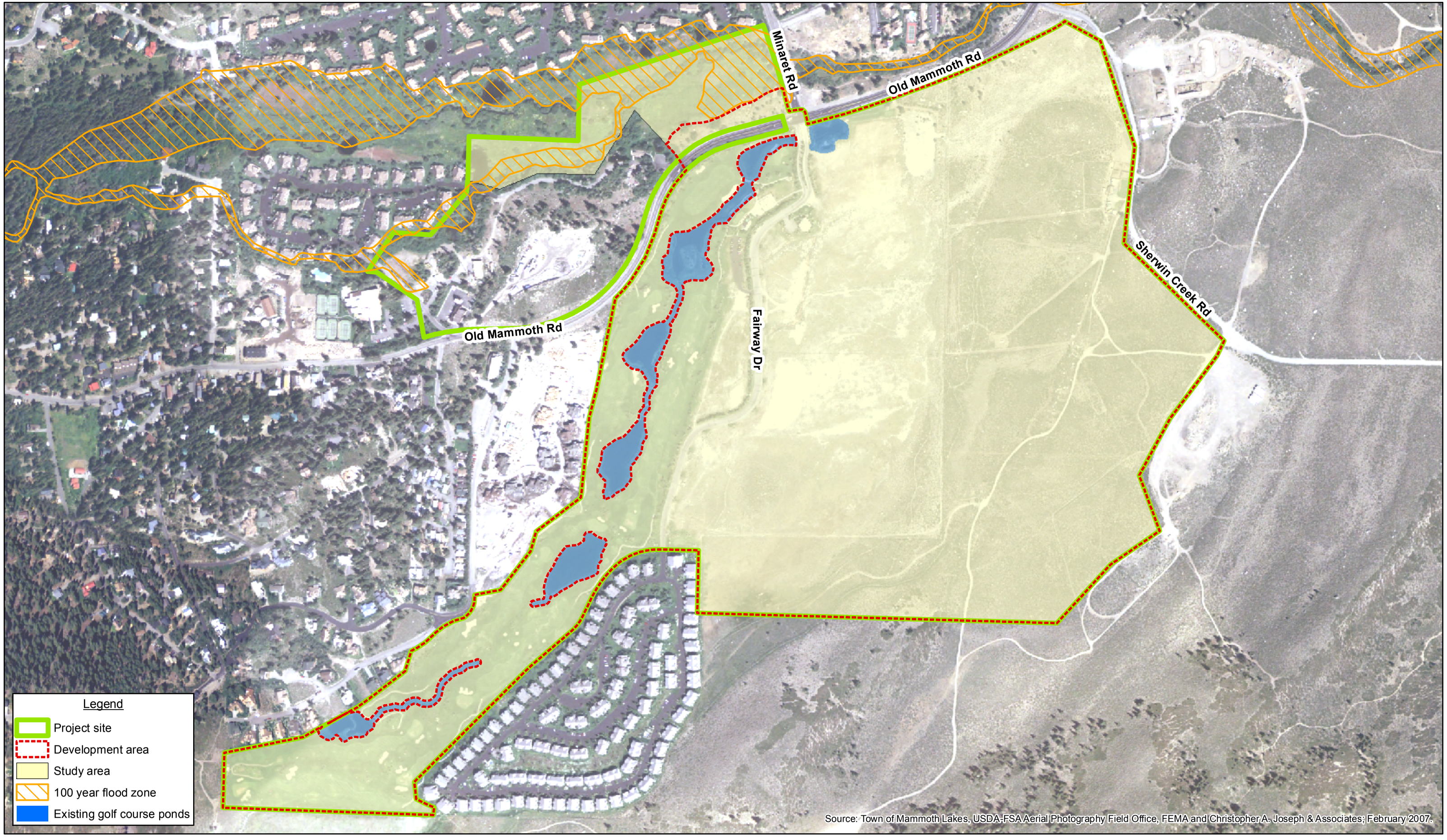
Environmental Planning and Research

NORTH

Figure IV.G-2
Off-Site Drainage - Golf Course Area



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0 500 1,000 1,500 2,000
Feet

Figure IV.G-3: 100 Year Flood Limit

Back of Figure IV.G-3: Flood Zone Limits

Regulatory Framework

Federal and State Water Quality Programs

NPDES Permits and Related Requirements

The 1972 amendments to the Federal Water Pollution Control Act, later referred to as the Clean Water Act (CWA), prohibit the discharge of any pollutant to navigable waters of the United States from a point source unless the discharge is authorized by a National Pollution Discharge Elimination System (NPDES) Permit. While the original CWA focused on point source discharges (defined pipes and outfalls), stormwater discharges were added to the scope of the law by Congress in 1987. The United States Environmental Protection Agency (U.S. EPA) adopted final regulations that established Phase I stormwater discharge control requirements for the NPDES program in 1990. These regulations required large municipalities and specific industrial sites to obtain stormwater discharge permits under the NPDES program. In addition, these regulations required that stormwater discharge permits be issued to large construction activities consisting of five acres or more of land.

In 2003, the Phase II NPDES program requirements took effect, regulating nonpoint source discharges from all construction sites one acre or more in size and expanding the permit requirements to smaller municipalities. In California, the NPDES program is administered by the State Water Resources Control Board (SWRQB) through the nine Regional Water Control Boards (RWQCBs). Because the Town of Mammoth Lakes is a small community, it falls below the threshold for the Phase II NPDES program's municipal stormwater regulations. Therefore, the Town's municipal storm drainage system is not required to be covered by an NPDES permit. However, the construction activities component of the Phase II NPDES program does apply to construction sites that disturb one acre or more within the Town.

In 1992, the California State Water Resources Control Board (SWRCB) adopted the General Construction Activity Storm Water Permit (GCASWP or General Permit) which is "...required for all stormwater discharges associated with construction activity where clearing, grading, and excavation results in a land disturbance of 5 or more acres." However, by Modification of Water Quality Order 99-08-DWQ (approved by Motion on December 2, 2002) and consistent with the Phase II NPDES program for stormwater, the SWRCB lowered the threshold acreage of soil disturbance requiring permit coverage from 5 acres to 1 acre. Since development projected to occur as part of the Project would fall within these criteria, this Project must be covered under the General Permit. In order to be covered under the General Permit, the project applicant for each individual project to be developed within the Project area must submit a Notice of Intent (NOI) to the SWRCB. For coordinated development proposals, a single NOI can be submitted.

The General Permit requires all owners of land where construction activities occur (i.e., dischargers) to:

- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation;

- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP); and
- Perform inspections of stormwater pollution prevention measures (control practices).

The General Permit authorizes the discharge of stormwater associated with construction activity from construction sites. However, it prohibits the discharge of materials other than stormwater and all discharges which contain hazardous substances in excess of reportable quantities established at Title 40 Code of Federal Regulations Sections 117.3 or 302.4 unless a separate NPDES permit has been issued to regulate those discharges.

The General Permit requires development and implementation of a SWPPP, emphasizing Best Management Practices (BMPs), which are defined as "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States." The SWPPP has two major objectives:

- To help identify the sources of sediment and other pollutants that affect the quality of stormwater discharges; and
- To describe and ensure the implementation of practices to reduce sediment and other pollutants in stormwater discharges.

In addition, dischargers are required to conduct inspections before and after storm events and to annually certify that they are in compliance with the General Permit. The General Permit is currently being revised and reissued to include numeric action levels and numeric affluent limits for certain pollutants, additional BMP, and other measures to further minimize potential impacts associated with construction activities.

Water Quality Standards and TMDLs

In addition, the CWA requires states to adopt water quality standards for water bodies and to have those standards approved by the U.S. EPA. Water quality standards consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, and fishing) and water quality criteria necessary to support those uses. Water quality criteria are expressed either in the form of set numeric concentrations or levels of constituents, such as lead, suspended sediment, and fecal coliform bacteria, or narrative statements that describe the quality of water necessary to support a particular beneficial use. In 2000, U.S. EPA established numeric water quality criteria for certain toxic constituents in California receiving waters with human health or aquatic life designated uses in the form of the California Toxics Rule (CTR).[3]

The Lahontan RWQCB adopted the Water Quality Control Plan (Basin Plan) for the Lahontan Region in 1994. The Basin Plan has since been amended numerous times. The Basin Plan designates the beneficial

[3] *Title 40 Code of Federal Regulations Section 131.38.*

uses of receiving waters, including Mammoth Creek to which the Project site ultimately discharges via the Town's storm drain system, and specifies both narrative and numerical water quality objectives for these receiving waters. Water quality objectives, as defined by the California Water Code Section 13050(h), are the "limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses or the prevention of nuisance within a specific area." Because these standards are applicable to receiving waters, they do not apply directly to stormwater runoff from the Project site. Table IV.G-1, Designated Beneficial Uses of Mammoth Creek, lists the designated beneficial uses for Mammoth Creek and its tributary streams as described in the Basin Plan.

Table IV.G-1
Designated Beneficial Uses of Mammoth Creek

Beneficial Use	Designated Beneficial Use
MUN – Municipal and Domestic Supply	Existing or Potential
AGR – Agricultural Supply	Existing or Potential
FRSH – Freshwater Replenishment	Existing or Potential
COMM – Commercial and Sport Fishing	Existing or Potential
GWR – Groundwater Recharge	Existing or Potential
REC1 – Water Contact Recreation	Existing or Potential
REC2 – Non-Contact Water Recreation	Existing or Potential
COLD – Cold Freshwater Habitat	Existing or Potential
RARE – Rare, Threatened, or Endangered Species	Existing or Potential
MIGR – Migration of Aquatic Organisms	Existing or Potential
SPWN – Spawning, Reproduction, and Development	Existing or Potential
WILD – Wildlife Habitat	Existing or Potential
Source: Water Quality Control Plan, Lahontan Region; California Regional Water Quality Control Board, Lahontan Region, 1994.	

Under Section 303(d) of the CWA, states, territories, and authorized tribes are required to develop lists of impaired waters. Impaired waters are those particular waterbodies whose beneficial uses are being compromised by poor water quality. The law requires that these jurisdictions establish priority rankings for these impaired waters and develop Total Maximum Daily Loads (TMDLs) for the impairing pollutant(s) affecting each impaired waterbody. A TMDL is an estimate of the total load of each pollutant that a waterbody can receive from point, nonpoint, and natural sources without exceeding water quality standards. Once established, a TMDL allocates pollutant loadings among current and future point and nonpoint pollutant sources discharging to the waterbody.

In high runoff years, the Project site will seasonally discharge into Mammoth Creek. Mammoth Creek is identified in the 2002 Section 303(d) list of water quality impaired stream segments as impaired by metals. However, the listing is qualified with a statement that additional water quality monitoring is needed in order to determine the extent of the impairment and the need for a TMDL. Thus, the priority for TMDL is assigned as "low." Potential sources of potential elevated metals concentrations are identified as natural sources, urban runoff, and nonpoint sources.

The only TMDL-related work that is currently being undertaken by the RWQCB in the vicinity of the Mammoth Basin is the development of a nutrient TMDL for Crowley Lake, a reservoir on the Owens River downstream of the Mammoth Creek/Hot Creek confluence. However, the sources of these elevated nutrients are considered to most likely consist of pastures utilized for the grazing of cattle and located well downstream of the Town.

Additional Federal and State Regulations

Storm runoff from the Project site and discharges of runoff into and/or encroachment upon natural drainages, wetlands, and/or flood plains are subject to the requirements of the federal CWA and associated regulations, the State Porter-Cologne Water Quality Control Act and associated regulations, and to requirements established by the U.S. EPA, SWRCB, RWQCB, the Town, and the Mammoth Community Water District.[4] In addition, intrusions into jurisdictional areas are subject to the requirements of the CWA (Section 404/401 permitting) and Sections 1600-1607 of the State Fish and Game Code (the "Streambed Alteration Agreement Act"), and to the respective requirements established by the U.S. Army Corps of Engineers (Corps) and California Department of Fish and Game (CDFG) to administer these programs. As noted above, while there are areas north of Old Mammoth Road on the Project site that are jurisdictional for the Corps, none of these jurisdictional resources will be altered or filled by the proposed Project. Other sensitive sites south of Old Mammoth Road may be subject to the regulatory jurisdiction of the RWQCB and/or the CDFG.

Section 401 of the CWA requires that any person applying for a federal permit or license which may result in a discharge of pollutants into waters of the United States must obtain a state water quality certification that the activity complies with all applicable water quality standards, limitations, and restrictions. No license or permit may be issued by a federal agency until certification required by Section 401 has been granted. Further, no license or permit may be issued if certification has been denied. Section 401 water quality certification is normally provided with coverage under the General Construction Activities Stormwater Permit (GCASWP).

In addition to the designation of beneficial uses and the establishment of applicable water quality standards and criteria, the RWQCB Basin Plan also sets forth a series of land development guidelines intended to afford water quality protection for surface and groundwater (included in Appendix G to this Draft EIR). Although not mandatory, adoption of these guidelines by individual counties and municipalities within the Lahontan Region is recommended. In addition to these general guidelines, the RWQCB Basin Plan identifies a set of specific policies and guidelines applicable to the Mammoth Lakes area above the 7,000 foot elevation contour (which includes the Project site). The policy indicates that a Report of Waste Discharge is required not less than 90 days prior to the start of construction activities for new developments of either six or more dwelling units or commercial development involving soil

[4] *Federal CWA is at Chapter 33, United States Code, Sec. 1251 et seq.; Porter-Cologne Water Quality Control Act is at California Water Code, Sec. 13000 et seq.*

disturbance of 0.25 acre or more. The guidelines stipulate the specific components of this submittal, including the identification of interim erosion control measures to be applied during construction and short- and long-term erosion control measures to be employed following the construction phase.

Local Programs

The Town is currently in the process of updating the 1984 Storm Drainage and Erosion Control Design Manual that was prepared around the time the Town incorporated. This document specifies modeling and design approaches required for development projects located within the area served by the Town's storm drainage system. Although the new Storm Drain Master Plan Update is not yet finalized, progress has proceeded sufficiently far enough that current development proposals are expected to be consistent with the data and modeling approaches it utilizes. In addition, developments within the Town's storm drainage service area must comply with the erosion control requirements outlined in the 1984 Manual.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the State *CEQA Guidelines*, a significant impact would occur if a project would:

(a) Violate any water quality standards or waste discharge requirements;

(b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site;

(d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off the site;

(e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

(f) Otherwise substantially degrade water quality;

(g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

(h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

(i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or

(j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow.

As discussed in the Initial Study that was prepared for the Notice of Preparation (see Appendix A), the potential impacts associated with Thresholds, (i) and (j) listed above were determined to result in either a less than significant impact or no impact (see also Section IV.A of this EIR). In addition, no housing is proposed within a 100-year flood plain. Therefore, only Thresholds (a), (b), (c), (d), (e), (f), and (h) listed above are addressed in the following discussion.

Project Impacts and Mitigation Measures

Impact HYD-1 Water Quality Standards

A significant impact may occur if the Project discharges water that does not meet the quality standards of agencies which regulate surface water quality (in this case, the Lahontan RWQCB). Significant impacts would occur if the Project does not comply with all applicable regulations with regard to surface water quality as governed by the State Water Resources Control Board (SWRCB). These regulations include compliance with the land development policies and guidelines applicable to the Mammoth Lakes area above 7,000 feet specified by the RWQCB in the Basin Plan.

Construction-Related Impacts

Three general sources of potential short-term construction-related stormwater pollution associated with the proposed Project are: (1) the handling, storage, and disposal of construction materials containing pollutants; (2) the maintenance and operation of construction equipment; and (3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment. Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze, or other fluids on the construction site are also common sources of stormwater pollution and soil contamination. Generally, routine safety precautions for handling and storing construction materials may effectively mitigate the potential pollution of stormwater by these materials. These same types of common sense, "good housekeeping" procedures can be extended to non-hazardous stormwater pollutants such as sawdust, concrete washout, and other solid wastes.

In addition, grading activities can greatly increase erosion processes, leading to impacts on storm drains and sediment loading to storm runoff. Two general strategies are recommended to prevent construction silt from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed. Secondly, the area should be secured to control offsite migration of pollutants. The area of disturbance for this Project is greater than 1 acre; therefore the Project is subject to the requirements of the National Pollution Discharge Elimination System (NPDES) requirements for construction projects as enforced by the RWQCB. The Project would require a Notice of Intent to

associate this Project with the General Permit and the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) during construction. Any work done in this area shall conform to Federal, State, and local permit requirements.

Specific BMPs to be implemented on the Project site would be identified in detail in the SWPPP to be prepared for the Snowcreek Master Plan area. These BMPs are likely to include the placement of riprap, rock cobble, and rock mulch, the use of existing sedimentation basins, and the installation of infiltration trenches.

Construction activities associated with all proposed development within the Project site would be subject to inspection and would be required to be conducted in conformance with the GCASWP. Coverage under this permit must be obtained from the RWQCB prior to start of construction. The General Permit requires that non-stormwater discharges from construction sites be eliminated or reduced to the maximum extent practicable, that a SWPPP be developed governing construction activities for the Project, and that routine inspections be performed of all stormwater pollution prevention measures and control practices being used at the site, including inspections before and after storm events.

The SWPPP prepared for construction of the Project must also address hazardous materials storage and use, erosion and sedimentation control, and spill prevention and response in addition to identifying measures for preventing non-stormwater discharges to surface water drainages and the Town's storm drain system. In addition, provisions for implementing the land development policy and guidelines pertaining to the Mammoth Lakes area in the Basin Plan must be included in the SWPPP. The required implementation of the BMPs in the Project's SWPPP would ensure that Project construction activities within the Project site would not cause the violation of any water quality standards within Mammoth Creek. Thus, the Project would be considered to have a ***less than significant*** impact on the ability of Mammoth Creek to attain all applicable water quality standards.

Operation-Related Impacts

Activities associated with operation of the Project would generate substances that could degrade the quality of water runoff. The deposition of certain chemicals by cars in the parking areas and the internal roadway surfaces could have the potential to contribute metals, oil and grease, solvents, phosphates, hydrocarbons, and suspended solids to the storm drain system. Additionally, the golf course expansion (Areas E2, E4, and F) may be irrigated with potable or untreated well water. This water would be used to irrigate the proposed string of stormwater retention basins along Old Mammoth Road and to irrigate the new golf course south of the basins. At this time, mitigation requirements for the use of reclaimed water have not been determined. However, impacts to water quality generated from Project operation can be reduced through the implementation of BMPs and mitigation measures designed to be protective of receiving water quality.

An 18-foot wide vegetative swale would connect the retention basins on the proposed golf course expansion areas to an existing 60-inch culvert under Sherwin Creek Road. During a 20-year storm, the velocity of stormwater runoff in the swale would be 3.5 ft/s. Since the "cleansing" of runoff occurs

mostly during storms of a 2-year or less frequency, the velocity of runoff during such events would be even lower, thereby allowing for proper performance of the swale. In addition the proposed swale would be landscaped as opposed to the existing dirt with scattered vegetation, which would additionally slow the velocity of stormwater runoff, further increasing the "cleansing" function of the swale. The system of proposed retention/infiltration basins would be designed to infiltrate to groundwater all runoff with the exception of rare large storm or snow melt events (see discussion below under Impact HYD-4). In extremely rare situations, excess runoff would travel via the vegetative swale described above to the existing culvert under Sherwin Creek Road, where it would discharge to Mammoth Creek.

Although the discharge of stormwater from the developed portions of the Project site to Mammoth Creek is expected to be an extremely rare event, implementation of Mitigation Measure HYD-1 below would reduce potential operational Project impacts on water quality in Mammoth Creek to a ***less than significant*** level.

Mitigation Measure HYD-1

The golf course expansion (Areas E2, E4, and F) area may be irrigated with reclaimed or potable water. At this time, mitigation requirements for the use of reclaimed water have not been determined. However, if reclaimed water is used for irrigation, options shall be explored to limit reclaimed water from entering the tributary area that flows toward Mammoth Creek. These measures could include:

- Irrigate all retention basins and the swale from the retention basins (located to the west of Sherwin Creek Road) using potable water.
- Irrigate any landscaping within or directly tributary to these features which requires irrigation using potable water. Golf course areas immediately south of the basins shall be constructed to retain all stormwater runoff and shall not overflow to the basins.
- Increase capacity of on-site retention for the golf course areas irrigated with reclaimed water to include capacity for a storm of 100-year intensity.
- Grade southeasterly limits of the golf course expansion area in some locations to block tributary drainage from the south and direct it east toward Sherwin Creek Road.

At this stage, it is unknown if it will be required to limit reclaimed water from entering the tributary area that flows toward Mammoth Creek. The final determination of outflow conditions if reclaimed water is used will be made during the final design in coordination with the RWQCB and other applicable agencies. In the event that reclaimed water is used, the above mitigation measures will be implemented to avoid any impacts to the water quality of Mammoth Creek.

In consultation with the Town, the Project applicant shall identify and implement a suite of stormwater quality BMPs designed to address the most likely sources of stormwater pollutants resulting from operation of the proposed development projects within the proposed Project area. Pollutant sources and pathways to be addressed by these BMPs include, but are not necessarily limited to, parking lots,

maintenance areas, trash storage locations, rooftops, interior public and private roadways, the golf course, and storm drain inlets. These BMPs shall include detention and sedimentation basins as well as infiltration devices designed to filter runoff from paved areas on the Project site. The design and location of these BMPs will be subject to review and comment by the Town but shall generally adhere to the standards associated with the Phase II NPDES stormwater permit program.

Implementation of these BMPs shall be assured by the Community Development Director and Town Engineer prior to the issuance of Grading or Building Permits. Compliance with these mitigation measures would reduce potential impacts resulting from Project operation on receiving water quality in Mammoth Creek to a ***less than significant*** level.

Impact HYD-2 Groundwater Depletion or Recharge

A significant impact may occur if a Project would substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

Construction-Related Impacts

Groundwater seepage was encountered at the Project site at depths as high as 2 feet and as low as 8.5 feet below the existing grade. Groundwater conditions often fluctuate seasonally and depths recorded may not necessarily be reflective of groundwater elevations during construction. Groundwater pumped during construction from the Project site would not be extensive and would be conveyed to one of the existing retention basins located within the existing golf course area. This amount of groundwater pumping would not be substantial enough to deplete or interfere with groundwater recharge and would be considered ***less than significant***.

If required, dewatering must be done in accordance with the General Permit adopted by the Lahontan RWQCB – NPDES No. CAG996001. The applicant shall apply for coverage under this permit prior to beginning any dewatering work.

Operation-Related Impacts

The site is subject to high groundwater. Due to typical heavy snowpack melting in the spring, nearly all sites in Mammoth Lakes are subject to seasonal high groundwater and structures need to be protected from high groundwater levels. All Project structures, including but not be limited to underground structures, parking garages, basements, underslabs, and crawl spaces would require subdrains, which would drain to retention basins. With implementation of Mitigation Measure HYD-2, anticipated impacts pertaining to groundwater intrusion to Project structures would be reduced to a ***less than significant*** level.

As shown in Figure IV.G-2, the proposed retention basins along Old Mammoth Road have been sized to retain and infiltrate runoff from the residential/commercial areas within the Project as well as runoff from

other prior off-site developments which are tributary to these basins. The direction of runoff from the increased impervious surface areas of the Project to these basins would provide for groundwater recharge and would reduce operation-related impacts concerning groundwater recharge to a ***less than significant*** level.

Mitigation Measure HYD-2

All underground structures shall be designed with exterior wall drain board to a footing drain system as well as underslab subdrains. Crawl spaces shall be protected with proper ventilation and subdrains. The system shall be designed such that subdrains shall be designed with outlet systems that have maximum water surface elevations lower than the bottom of the subdrains to ensure that subdrains would not be inundated with stormwater when retention basins reach capacity. Subdrain design shall be based on final Project design and shall be adequately sized so that retention basin capacity is maintained for stormwater retention purposes. Implementation of this measure would reduce this impact to a ***less than significant*** level.

Impact HYD-3 Drainage Pattern Alteration

Construction-Related Impacts

Development of the currently undeveloped areas within the Project site would result in the modification of existing drainage paths and a higher amount of surface runoff than is currently generated by these areas. Siltation or other pollution carried by this increased runoff can be delivered to adjacent drainage channels during construction and can impact aquatic organisms and water quality downstream of the Project site.

As discussed above under Impact HYD-1, the required implementation of the BMPs in the Project's construction SWPPP would ensure that Project construction activities within the site would not cause substantial erosion or siltation on- or off-site. These BMPs would include, at a minimum, such measures as limiting site grading to dry spring, summer and fall months and siltation controls.

Operation-Related Impacts

Activities associated with the operation of the Project are not considered likely to substantially increase on- or off-site erosion or siltation. Nonetheless, the proposed installation of permanent storm control facilities and sedimentation/infiltration basins will reduce Project-generated erosion and siltation impacts (see Mitigation Measure HYD-1). No significant impacts pertaining to Project operation-generated erosion and siltation are anticipated to result from new development at the Project site.

Thus, the Project would have a ***less than significant*** impact in terms of increasing on- or off-site erosion and siltation through the alteration of existing drainage patterns.

Impact HYD-4 Drainage System Capacity

The Project would create 43 acres of impervious surfaces consisting of roofs, drives, and parking areas. The Project would include 24 acres of landscaped areas. With the exception of Area D, all post-development on-site runoff would be collected and conveyed via swales, inlets, and pipe networks to a series of retention/infiltration basins on the Project site (including the golf course lakes system located on the west side of the Project site). From these points, if sufficient stormflow occurs, the basins would discharge excess runoff to vegetated swales, culverts, and an additional swale at Sherwin Creek Road. Discharge to Mammoth Creek from this system of basins and swales would occur only under exceptional stormflows.

Stormwater runoff flow rates were calculated for on-site and off-site tributary areas. Consistent with the requirements of the Basin Plan for the Mammoth Lakes area, all retention/infiltration systems would be designed to retain stormwater runoff from a 20-year, 1-hour design storm (1.0 inch of rainfall) for on-site drainage. Off-site drainage systems would be designed for a 20- or 100-year design storm. .

Drainage Within Residential/Commercial Site

Post-development drainage within the developed area of the Project site would be conveyed by roadside swales, drop inlets, and storm drain pipes to lakes, basins, or other stormwater retention facilities. For on-site drainage, the typical inlets have been preliminarily sized at 16 by 16 inches, with several 24 by 24 inch inlets. The on-site drainage facilities would be sized to convey the flows generated during a storm of 20-year intensity.

As shown in Figure IV.G-1, the residential/commercial portion of the Project site is divided into four areas: Areas A, B, C, and D. Area A is 15.6 acres and drains primary to the southwest, Area B is 7.7 acres and drains to the west, Area C is 43.1 acres and drains to the north, and Area D (located north of Old Mammoth Road) is 0.5 acres and drains predominantly to the north. Additionally, Areas A, B, and C were divided into smaller subareas (A1-A8, B1-B4, and C1-C16) in order to preliminarily size the on-site drainage facilities.

Area D is bounded by Old Mammoth Road on the south, Minaret Road on the east, and a proposed bike path on the north and west. The bike path in this location is part of the conditions of approval for the Snowcreek VII development and has been preliminarily designed to function as a berm in order to keep the on-site runoff from entering Mammoth Creek directly. On-site runoff from Area D would be directed toward a retention/infiltration basin with a capacity of approximately 1,500 cf for an entire storm of 100-year intensity.

The Project would construct a new retention/infiltration system south of Old Mammoth Road and west of Sherwin Creek Road. The preliminary design would include an existing basin and six new basins with spillways. The present location for stormwater retention is less than ideal in heavy runoff years as a portion of Fairway #9 can be flooded, impacting golf play. The Project would reduce the stormwater

retention in this existing basin to approximately 71,200 cf. The series of six unlined basins would provide approximately 333,600 cf of storage.

The Project requires approximately 169,200 cf of storage. Existing development on surrounding sites, including Snowcreek VI and VII, require about 150,000 cf of storage, which is currently provided on the existing nine-hole golf course at the lower pond on both sides of Minaret Road. The total of the existing and Project requirements is 319,200 cf, which would result in approximately 14,400 cf of extra remaining capacity after all planned uses are developed at the Project site.

Golf Course Drainage (Tributary to Residential/Commercial Site)

Existing and proposed conditions were evaluated for the entire Basin 2.4 and 2.5 (as delineated in the Town of Mammoth Lakes Stormwater Master Plan, 2005) sub-basin that the Project would be located within. Existing runoff for the 100-year storm for this basin is 131 cfs, which is conveyed to Mammoth Creek via a 60-inch culvert located under Sherwin Creek Road. With the Project, runoff volume within this sub-basin would be increased to 139 cfs. This increase includes runoff from the golf course areas and may be reduced if runoff is not allowed from the golf course. Calculations prepared for the Project show that the existing 60-inch culvert is adequate to convey this increased runoff.

Conveyance systems would be designed for a storm of 100-year intensity. Off-site tributary areas are located south of the Project site as shown in Figure IV.G-2 and are subdivided into four sub-areas: E1 (9.2 acres), E2 (12.6 acres), E3 (4.7 acres), and E4 (37.7 acres). Areas E2 and E4 are part of the expanded golf course. Area E4 would not be tributary to the residential/commercial site and is discussed below. Runoff from Areas E1, E2, and E3 would be conveyed via a combination of vegetated swales and storm drains and contained south of the residential/commercial site in retention facilities located on the proposed new golf course with the capacity to retain approximately 46,200 cf for a storm of 100-year intensity or 31,000 cf for a storm of 20-year intensity. These retention facilities would be sand traps and/or natural and manmade depressions. The final determination of retention/infiltration requirements for the Project would be made in compliance with RWQCB, Town, and other relevant policies and regulations.

Golf Course Expansion Drainage (Not Tributary to Residential/Commercial Site)

Areas E4 and F are part of the golf course expansion but are not tributary to the residential/commercial site. The golf course expansion (Areas E2, E4, and F) would be irrigated with reclaimed or potable water. Golf course runoff would need to be contained on-site (within the golf course) or treated for nitrates or other potential pollutants that could be added to the runoff due to golf course operations. Areas E2 and E4 are not expected to discharge stormwater runoff to Mammoth Creek except during extremely rare events. The final determination of outflow conditions if reclaimed water is used would be made during the final design in coordination with the RWQCB and other applicable agencies. On-site retention for the 100-year storm would require approximately 3,000 cf of retention for each acre of golf course area. Should the golf course be allowed the standard 1-inch storm retention, approximately 1,000 cf per acre of

course area retention would be required. This retention could consist of facilities such as depressions, basins, sand traps, or pond freeboard, and shall include all of the new golf course up to the point where it overflows to the basins or otherwise leaves the site.

Compliance with the mitigation measure below would reduce potential impacts resulting from Project operation to a ***less than significant*** level.

Mitigation Measure HYD-4

In consultation with the Town of Mammoth Lakes and RWQCB, and subject to Town approval, the Project applicant shall identify and implement a suite of storm drainage facilities designed to safely capture, treat, and convey runoff from the required design storms. In addition, a detailed set of maintenance procedures necessary to assure that storm drainage facilities continue to work as designed shall be established and approved by the Town, in consultation with the RWQCB. Particular items requiring maintenance include, but are not limited to, cleaning of grates, removal of foreign materials from storm drainage pipes, maintenance as necessary for outlet facilities and retention basins, and repairs as necessary to damaged facilities.

Impact HYD-5 100-Year Flood Hazard

A significant impact may occur if a Project would place structures which would impede or redirect flood waters in a 100-year flood zone. There is no 100-year flood zone south of Old Mammoth Road and west of Sherwin Creek Road. A small portion of the Project site north of Old Mammoth Road where the Market/General Store would be located is adjacent to Mammoth Creek and is within a 100-year flood zone. However, all development in this portion of the Project site would be placed outside the 100-year flood zone. Thus, the Project would have a ***less than significant*** impact with respect to flood hazards.

CUMULATIVE IMPACTS

Impact HYD-6

Development of the Project in combination with the related projects would result in the further infilling of uses within the Urban Growth Boundary. The surrounding area primarily consists of a patchwork of undeveloped areas and developed impervious urbanized surfaces, and is served by existing storm drains that would be expanded in order to serve new development. It is likely that most of the related projects would drain to the Town's storm drain system and ultimately to Mammoth Creek. Each individual related project would be required to submit a drainage analysis to the Town. Each drainage analysis must illustrate how peak flows generated from each related Project site would be accommodated by the Town's existing and/or proposed storm drainage facilities. Where necessary, each related project would be required to include detention or infiltration features designed to reduce the total rate and/or volume of runoff generated at its site.

The Project would include retention basins of sufficient capacity to retain all runoff on-site, with eventual discharge to Mammoth Creek. The Project would not be connected to the Town's storm drain system. The Project would include BMPs to reduce erosion and impacts to water quality. The Project would not result in any cumulatively considerable impacts to the Town's existing or planned stormwater drainage system capacity. In addition, per the Basin Plan, development on each site larger than 0.25 acre above the 7,000 foot elevation level would be subject to uniform policy guidelines designed to minimize the water quality impacts associated with Project construction to the maximum extent practicable. All related projects that disturb one acre or more must also obtain coverage under the GCASWP, including the preparation and submittal of a SWPPP to govern all construction activities associated with each project. As a result, cumulatively considerable water quality and erosion/siltation impacts would be ***less than significant***.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts to surface and groundwater resources and hydrology would be ***less than significant*** after implementation of the mitigation measures.

IV. ENVIRONMENTAL IMPACT ANALYSIS
H. LAND USE & PLANNING

ENVIRONMENTAL SETTING

Project Site and Surrounding Land Uses

The approximate 237-acre Project site is located just inside the southeastern boundary of the Town at the foot of the Sherwin Range, a steep extension of the Sierra Nevada with elevations up to 11,728 feet. The Project site is comprised of the following Assessor's Parcel Numbers (APN) and associated land use areas shown in parenthesis: 40-040-20 (Area A), 40-070-10 (Area J & G), 40-070-11 (Area B-F, H & K), 40-070-12 (Area I), 40-070-13 (Area I), 40-070-23 (Area I), 40-140-04 (Area I & L), and 40-140-05 (Area I), (refer to Figures II-1 through II-3 in Section II, Environmental Setting, of this Draft EIR).

The Project site is a portion of the approximate 440-acre Snowcreek Master Plan area, including 94 acres outside the 1981 Master Plan boundary that are also included as part of the golf course expansion. The Project site consists of the undeveloped portions of the Snowcreek Master Plan area and an existing privately owned publicly accessible nine-hole golf course west of Fairway Drive. Except for the existing golf course, the Project does not include the remainder of the existing Snowcreek Master Plan area within which development has either occurred or is currently in progress. Existing/entitled developments that are not part of the Project site include the residential areas of Snowcreek I, II, III, IV, V, VI and VII, and the Snowcreek Athletic Club (refer to Table III-1 in Section III, Project Description, of this Draft EIR).

The Project site is primarily undeveloped, with the exception of the following existing uses: an existing privately owned publicly accessible nine-hole golf course located west of Fairway Drive, a public golf driving range located east of Fairway Drive, and the Snowcreek Investment Company L.P. offices and Snowcreek sales and marking office located along Fairway Drive, both of which are considered temporary facilities. The Inyo National Forest Service administrative site (i.e., tack room and storage facilities) currently located on far eastern edge of the Project site are in the process of being relocated to United States Forest Service (USFS) land east of Sherwin Creek Road.

The Project site is primarily bounded to the east by Sierra Meadows Ranch, to the south and east by Inyo National Forest lands, to the north and west by Snowcreek development and other residential developments. Surrounding 1987 General Plan land use designations include High Density Residential (HDR), Low Density Residential (LDR), Institutional/Public Facilities (IP), Open Space/Stream Corridor (OSSC), and Resort (R). These are consistent with the land uses in the Draft 2007 General Plan with the exception of the IP designation. Surrounding zoning designations include Residential Single Family (RSF), Mobile Home Park (MHP), Residential Multi-Family 2 (RMF-2), Resort (R), and Open Space Stream Corridor overlay (OSSC) (refer to Figure II-4 through Figure II-8).

Land Use Designation and Zoning

Town of Mammoth Lakes 1987 General Plan

California State Government Code Section 65300 requires each county and city, including charter cities, to adopt a comprehensive General Plan which should be integrated and internally consistent with a compatible statement of goals, objectives, policies and programs to provide for a decision-making basis on physical development. The Project site falls within the jurisdiction of the Town of Mammoth Lakes General Plan (General Plan). The General Plan was adopted in October 1987 and was designed to promote the public health, safety and general welfare of the community. The 1987 General Plan consists of seven elements, including: 1) Land Use and Public Facility; 2) Transportation and Circulation; 3) Housing; 4) Conservation and Open Space; 5) Safety; 6) Noise and 7) Parks and Recreation (adopted in 1991).

According to the 1987 General Plan, the Project site is currently designated Resort (R), Open Space (OS) and Open Space Stream Corridor (OSSC). Table IV.H-1 depicts the allocation of land uses on the Project site in relation to onsite APNs.

In the 1987 General Plan, Resort use is characterized with primary emphasis to visitor lodging, amenities and services. Development in the Resort designation is generally applied to large parcels and is physically connected internally and to all primary visitor oriented destinations with an integrated system of streets, sidewalks, and recreational paths. This designation includes mixed visitor oriented uses including lodging, visitor oriented commercial, and recreation uses. Maximum housing densities range between six units per acre and eight units per acre. Development standards are similar to those for equivalent uses in other designations. Lot coverage is limited to 50 percent of the overall Project area to provide space for outdoor recreation amenities.

The Open Space designation is applied to lands that have significant recreational or environmental values. The Open Space designation permits development of facilities that support the environmental and recreational objectives of the community. This zone may include environmentally sensitive areas such as wetlands, floodplains, and streams and may include recreation facilities such as parks, athletic fields, golf courses, and community gathering spaces.

As previously discussed in the Section II (Environmental Setting) and Section III (Project Description) The area designated as Open Space on the Project site was transferred to private ownership in 2005 by means of a land exchange (2005 Land Exchange) between the United States Forest Service (USFS) and Snowcreek Investment Company in order to acquire enough land for a nine-hole addition to create an 18-hole golf course. After the 2005 Land Exchange, Snowcreek Investment Company entered into a covenant with the Town that protected the exchange parcel from being developed with residential housing, commercial lodging, transient occupancy, and from being further subdivided as this land is outside the Town's Urban Growth Boundary. The covenant was initiated as a part of the exchange

process, and is monitored by the Eastern Sierra Land Trust. The conditions of the land exchange covenant are described in further detail below. (see Appendix K of this Draft EIR)

The 1987 General Plan policies applicable to the Project are discussed further below in the Environmental Impacts section in Table IV.H-2.

Table IV.H-1
Existing Land Use and Zoning On Site

APN	Area (acres)	Legal	General Plan Land Use	Zoning
40-040-20	15.6	Lot 2 of Tract 36-236A per map recorded in Book __ of Tract Maps at Page __ in the office of the County Recorder, Mono County, Calif. (pending)	Resort	Resort, Open Space Stream Corridor overlay
40-140-05[1] 40-140-04[1]	94	Tract 46 and 47, Sec. 2, T.4 S., R.27 E., M.D.M., Mono County, Calif.	Open Space	Open Space
40-070-23	56.41	Lot Line Adjustment Parcel 2 of Lot Line Adjustment 2003-06 per Certificate of Compliance recorded as Document #2003011728 in the office of the County Recorder, Mono County, Calif.	Resort	Resort
40-070-10	6.66	Lot 3 of Tract No 36-166 per map recorded in Book 10 of Tract Maps at Page 21 in the office of the County Recorder, Mono County, Calif.	Resort	Resort
40-070-11	52.74	Lot 4 of Tract No 36-166 per map recorded in Book 10 of Tract Maps at Page 21 in the office of the County Recorder, Mono County, Calif.	Resort	Resort
40-070-12	0.39	Lot 6 of Tract No 36-166 per map recorded in Book 10 of Tract Maps at page 21 in the office of the County Recorder, Mono County, Calif.	Resort	Resort
40-070-13	6.28	Lot 5 of Tract No 36-166 per map recorded in Book 10 of Tract Maps at Page 21 in the office of the County Recorder, Mono County, Calif.	Resort	Resort

[1] *Subject property in 2005 Land Exchange (see discussion below).*

Town of Mammoth Lakes 2007 Draft General Plan

The 1987 General Plan is currently in the process of being updated following a four-year planning and review process. A Draft Program EIR was previously prepared and circulated regarding an earlier version of the General Plan Update. A Notice of Preparation (NOP) for the Draft Program EIR was distributed on April 25, 2003. A Draft Program EIR was prepared and distributed to the public for review from February to May 2005 for public comments. Based on the extent and range of comments received, the Town determined that the proposed General Plan should be revised to the extent that required recirculation of a Revised Draft Program EIR. The Revised Draft Program EIR was circulated for public review from October 31, 2005 to December 14, 2005. The Town adopted the Draft 2007 General Plan on August 15, 2007 and is currently considering the Revised Final Program EIR on the General Plan Update for certification. The 2007 General Plan consists of nine elements, including: 1) Economy; 2) Arts, Culture, Heritage, and Natural History; 3) Community Design; 4) Neighborhood District Character; 5) Land Use; 6) Mobility; 7) Parks, Open Space, and Recreation; 8) Resource Management and Conservation; and 9) Public Health and Safety.

The 2007 General Plan also designates the Project site as Resort (R) and Open Space (OS). The R designation allows commercial mixed uses including visitor lodging, amenities and services, and workforce housing. Resort developments include recreation, meeting spaces, and commercial services that support the resort atmosphere. The base density is 6 to 8 dwelling units per acre, and 12 to 16 hotel rooms per acre. This designation is generally applied to large parcels capable of providing a complete resort experience as found in the master plan areas of Sierra Star, Snowcreek, and Juniper Ridge. The OS designation is established to protect the community's public and private open space resources. It is intended to preserve existing parks and encourage future parks, maximize recreation opportunities, preserve open space, and protect sensitive environmental resources. Facilities that support the environmental and recreational objectives of the community are permitted. The OS designation may apply to environmentally sensitive areas such as wetlands, floodplains, and streams. This designation allows parks, athletic fields, golf courses, community gathering spaces and supporting facilities. The OS designation also applies to patented mining claims located on the Sherwin Range.

In addition, the 2007 General Plan includes policies in the Neighborhood and District Character Element specifically addressing the Snowcreek District. The 2007 General Plan polices applicable to the Project are discussed further below in the Environmental Impacts section in Table IV.H-3.

Town of Mammoth Lakes Zoning Regulations

The Zoning Ordinance (Mammoth Lakes Municipal Code, Title 17) sets forth provisions governing the use and development standards of land, buildings, and structures in the Town. Some of those development standards address the size of yards abutting buildings and structures, height and bulk of buildings, density of population, number of dwelling units per acre, standards of performance, and other development criteria. The purpose of the Zoning Ordinance is to promote and protect the public health,

safety, and welfare of the people of the Town, to safeguard and enhance the appearance and quality of development of the Town, and to provide for the social, physical and economic advantages resulting from comprehensive and orderly planned use of land resources (Section 17.04.010).

The Project site is zoned Resort (R) and Open Space (OS). Similar to the land use distributions on the site, the portion of the site zoned as OS includes the parcels that were the subject of the 2005 Land Exchange, while the remainder of the site is located within the R zone (see Table IV.H-1, above). In addition, the portion of the Project site located north of Old Mammoth Road (in the Resort zone) also falls within the OSSC (Open Space Stream Corridor) overlay zone. The OSSC zone is set back approximately 25-40 feet from the northern boundary of Old Mammoth Road.

Resort Zone

The Resort Zone is one of eight "special purpose zones" described in the Zoning Ordinance. Special purpose zones are established because of the special or unique land use characteristics with which they are associated and because of the need to implement specific sections of the General Plan (Section 17.28.010). Specifically, the Resort Zone is designed to achieve the following purposes:

- To provide for the classification and development of parcels of land as coordinated, comprehensive projects so as to take advantage of the superior environment which can result from large scale community planning;

- To allow diversification of land uses as they relate to each other in a physical and environmental arrangement, while ensuring substantial compliance with the provisions of this title; and

- To provide for a zone classification encompassing various types of land uses such as: single-family residential developments, multiple housing projects, professional and administrative office uses, hotels including attendant support commercial activities, recreational facilities, public or quasi-public uses, or combinations of such uses through the adoption of a development plan and text materials which set forth land use relationships and development standards. (Ord. 89-05 §1(part), 1989: prior code §19.12.041).

The following general requirements apply to all resort zone properties (Section 17.28.240):

- An application for a zone change to permit the establishment of a resort zone shall include and be accompanied by a development plan for the entire property;
- An application for development of property within a resort zone shall be subject to the approval of a development plan by the planning commission and town council;
- The area contained within a proposed resort zone shall be not less than twenty acres;
- A use permit may be required for any land use designation on the development plan;

- If ambiguity exists as to the specific dimensions or extent of any designated area on the development plan, the specific boundaries shall be set by the filing of a record of survey of the parcel in question in conjunction with the filing of a use permit, tentative subdivision, or parcel map, or construction permits;
- The maximum permissible density for residential uses is eight units per acre;
- Densities for hotel/motel uses shall be computed at a ratio of two guest rooms for each unit;
- The maximum site coverage in the resort zone shall be fifty percent;
- Existing properties located within a resort zone shall not be subdivided unless the subdivision map is in conformance with an approved development plan. (Ord. 00-01 §1(Exh. A(part)), 2000; Ord. 96-01 §1(part), 1996; Ord. 90-06 §1(part), 1990: Ord. 89-05 §1(part), 1989: prior code §19.12.043)

Permitted uses in the Resort Zone include:

- Those uses designated on the development plan for the particular property as approved by the Town council;
- The continuation of all land uses which existed in the zone at the time of adoption of the development plan. Existing land uses shall either be incorporated as part of the development plan or shall terminate in accordance with a specific abatement schedule submitted and approved as part of the development plan;
- Public utility installations;
- Accessory uses and structures incidental to permitted uses;
- Temporary uses as described in Sections 17.32.010 through 17.32.080;
- Those uses outlined in Section 17.28.220(C) subject to a use permit when proposed on parcels having less than twenty acres in area; and
- Fractional-use projects subject to a use permit and the requirements of Section 17.32.200 et seq. (Ord. 04-01 §1(Att. A(part)), 2004; Ord. 89-05 §1(part), 1989: prior code §19.12.042).

As per Section 17.28.250, performance and environmental standards in the resort zone shall be as specified in the development plan or accompanying text but shall be not less than those specified for similar uses in the residential or commercial zones. Also, the development plan shall indicate the design theme for the entire Project; generally the theme shall conform to the requirements of Sections 17.32.120 through 17.32.150. (Ord. 90-06 §1(part), 1990: Ord. 89-05 §1(part), 1989: prior code §19.12.044)

As per Section 17.28.270, the development plan shall consist of maps, plans, reports, schedules, development standards and schematic drawings and such other documents deemed necessary by the planning director in accordance with the following requirements:

- The development plan shall be submitted in a form approved by the planning director and shall be sufficiently detailed to show all intended uses and their location on the property;
- The development of sections or areas within the resort zone may be permitted subject to one of the following or any combination thereof:
    - The uses and requirements of any of the zone classifications established by this title;
    - The uses and standards of development set forth in the development and text as approved and adopted by the town council;
    - Approval of a use permit prior to development;
    - Approval of a tentative subdivision map or parcel map.
- The development plan and any amendment thereto shall include the following:
    - The type and character of buildings or structures and the number of dwelling units per gross acre proposed for each residential area;
    - A statement of the standards of population density for the various proposed residential land uses;
    - The general location of school sites, recreational areas, and other public and semi-public sites and the approximate area of each;
    - The general location of all arterial and collector streets, all transit systems whether surface or aerial and all trails systems coordinated with the transportation and circulation element of the Town general plan.
- The development plan and any amendment thereto shall be accompanied by the following:
    - A general land use map setting forth the proposed uses of all sections or areas within the subject property and the acreage of each;
    - An accompanying text setting forth the land use regulations which constitute the standards of development designed to govern those sections or areas specified in the development plan. Such standards shall contain definitions and information concerning requirements for building site coverage, building heights, building setbacks, off-street parking, vehicular

access, signing, lighting, storage, screening and landscaping, and any other information which the planning director shall require to ensure substantial compliance with the purpose of the resort zone;

- A topographic map and conceptual grading plan of the property;

- A preliminary report and overall plan describing proposed provisions for storm drainage, sewage disposal, water supply and such other public improvements and utilities as the Town engineer may require. (Ord. 89-05 §1(part), 1989: prior code §19.12.046)

Open Space Zone

The Open Space zone is also a special purpose zone. Specifically, the Open Space Zone is designed to achieve the following purpose:

- The open space zone is intended primarily to be applied to those areas of the Town where it is desirable and necessary to provide permanent open spaces in conformance with the open space designations of the general plan and to provide for the location and preservation of scenic areas and recreation areas. This zone classification is intended to be applied primarily to lands held under public ownership. (Ord. 89-05 §1(part), 1989: prior code §19.12.061)

Permitted uses in the Open Space Zone include:

- Historical landmarks; and

- Public or private parks and passive recreational facilities.

Additionally, the following uses are permitted subject to a use permit:

- All types of agriculture, horticulture, silviculture and related activities;

- Agricultural experimental facilities;

- Environmental research facilities;

- Flood control facilities;

- Forestry products and the removal thereof; not including processing plants or lumber mills;

- Geothermal exploration/production;

- Riding academies or commercial stables;

- Ski area development;
- Other recreational uses and facilities which satisfy an identified public need; and
- Public utility substations and facilities. (Ord. 90-06 §1(part), 1990: Ord. 89-05 §1(part), 1989: prior code §19.12.062)

In the open space zone, standards of development and performance including parking requirements and standards for signage for those uses requiring a use permit shall be set forth in the conditions of approval. (Ord. 89-05 §1(part), 1989: prior code §19.12.063)

Additionally, no sign or advertising structure shall be permitted except as provided in Chapter 17.40. (Ord. 89-05 §1(part), 1989: prior code §19.12.064)

Open Space/Stream Corridor Protection Zone

A portion of the parcel north of Old Mammoth Road falls within the open space stream corridor (OSSC) overlay zone. The OSSC protection zone is included in the Town's Zoning Code as an overlay or combining zone to protect sensitive stream and drainage courses from development, to recognize and preserve these environmentally sensitive areas as a community resource, and, to protect water quality and preserve wetland habitat. (Ord. 89-05 §1(part), 1989: prior code §19.12.081)

Permitted uses shall be identified by the underlying zone classification; however, in the open space stream corridor protection zone, a use permit shall be required for all uses except for a single-family dwelling on a single lot. Any development rights associated with private property contained within this zone classification may be transferred to other private land holdings subject to the granting of a use permit. (Ord. 90-06 §1(part), 1990: Ord. 89-05 §1(part), 1989: prior code §19.12.082)

The Market/General Store (Store), and Natural Resources and Historic Interpretive Center (Interpretive Center) would be on the already disturbed portion along Old Mammoth Road; an approximately 150 feet deep and 720 feet wide strip. Because this is greater than the approximate 25-40 foot wide Resort zone, it would encroach into the OSSC overlay zone. However, the OSSC overlay does not prohibit development. The development would not go beyond the wetland delineation line verified by the United States Army Corps of Engineers (refer to Figure III-5). A conservation easement may be recorded against the environmentally sensitive property and the land may be transferred to the Town or a conservation group agreeable to both parties which could allow for public access. The Project's compliance with the Clean Water Act (CWA) is discussed in Section IV.D, Biological Resources, of this Draft EIR.

Related Planning Efforts

1974 Snowcreek Master Plan

Dempsey Construction Company, the original developer of Snowcreek, began construction in the area in the late 1970s of the 1974 Snowcreek Master Plan. The Snowcreek Master Plan proposed 2,400 dwelling units on 355 acres (a gross residential density of 6.76 units per acre)[1], 150,000 square feet of commercial space and a one-acre service station site. Three development phases were eventually completed under the 1974 Master Plan consisting of approximately 17 percent of the total number of residential units planned for the Project (refer to Table III-1 and Figure III-1 in Section III, Project Description, of this Draft EIR). An EIR was prepared for the 1974 Master Plan, which was certified by Mono County in 1976.

1981 Snowcreek Master Plan

In 1981, Dempsey Construction Company proposed an updated Snowcreek Master Plan. The 1981 Master Plan included an additional 40-acre parcel at the southern edge of the property that had previously been traded to the USFS in exchange for a 30-acre parcel,[2] two school sites and one Town site. The 1981 Master Plan reduced the number of proposed dwelling units from 2,400 to 2,332, which, in light of the reduced acreage, had the effect of maintaining the Project density at the same 6.76 units per acre approved in the 1974 Master Plan (refer to Table III-1 in Section III, Project Description, of this Draft EIR). In addition, the 1981 Master Plan included the following changes:

- 2 acres designated as a Catholic church site
- 4.1 acres designated for employee housing
- A site designated for the Snowcreek Athletic Club
- An area designated for the first nine holes of the Snowcreek Golf Course
- Old Mammoth Road was realigned to alleviate hazardous driving conditions
- A roadway was added to provide access to Snowcreek V

An EIR was performed on the proposed 1981 Master Plan. The 1981 EIR emphasized that increased densities were not being requested, and that the mitigation measures adopted in the 1974 EIR to protect environmentally sensitive meadow lands along Mammoth Creek would remain in place.

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[1] *This consisted of 1,950 residential units, 300 condominium-hotel units and 150 motor in units.*

[2] *The 30-acre parcel is identified as Development Area 10 in the 1981 Master Plan (figure 1).*

After the EIR was approved, the Dempsey Construction Corporation entered into a Development Agreement with Mono County in 1982. A Development Agreement (DA) is a contract between a local government unit (LGU) and a developer. A DA provides security to both parties. The DA provides the LGU with a legally binding document that the developer would provide infrastructure and/or pay fees required by a new project. The DA provides the developer with a legally binding document that they can build the Project even if the LGU passes a growth-control initiative.

Mono County entered into the DA based on the findings that the 1974 Master Plan would result in the creation of a physical environment that would "…conform to and complement the goals of the community, providing housing, recreational and passive open space, sites for schools and religious worship, create an environment sensitive to human needs and values, and would protect adjacent land uses from adverse impacts." In addition, the County found that the 1974 Master Plan would be "…in the best interests of the County and would provide for orderly growth and development of the area consistent with the County's planning goals and objectives."

The DA required public works improvements, utilities and facilities, and was valid for 20 years. When the Town incorporated in 1984, the Town accepted and adopted the DA (Resolution #84-50). The terms of the DA were not extended after 20 years and the DA expired in 2002.

The 1981 Master Plan added essential public uses, including 0.91 acres of land for the construction of the Mammoth Community Fire District's Fire Station Number 2 and 1.53 acres for a water treatment facility. These properties were made available to the fire and water districts.

Approval of the 1981 Master Plan allowed for the construction of a total of 2,332 dwelling units. To date, 1,145 have been constructed, or are under construction with 1,223 units remaining (refer to Table III-1 and Figure III-1). Subsequent to the approval of the 1981 Master Plan, the following changes were made within the Snowcreek Master Plan area:

- Incorporation of 2.82 additional acres
- Relocation of the workforce housing site to west of Snowcreek Athletic Club and approval of a 4.87 acre Project in that area.

In 2005, an entity of The Chadmar Group purchased Snowcreek Investment Company, which included all the Snowcreek properties, excluding the Snowcreek Athletic Club.

Land Exchange Covenant

As noted above, use restrictions have been imposed on the eastern 94 acres of the Project site as defined in the February 15, 2005 land exchange covenant between the USFS and Snowcreek Investment Company (refer to Figure III-3 in Section III, Project Description, of this Draft EIR). The conditions set forth in the covenant apply only to this portion of the Project site and are as follows:

- The Property shall be used primarily as a golf course. Such use shall include as permitted uses: (1) all uses permitted by and consistent with zoning regulations, rules and ordinances of the Town, and as the same may be amended from time to time; (2) commercial activities permitted by and consistent with the foregoing and related to the operations of a resort recreational golf course, including without limitation (except as restricted by [the covenant]) the following: retail operations, food and beverage, transportation, storage, parking, nordic skiing, alpine skiing and snowboarding and other recreational activities.

- The Property may not be further subdivided where any such subdivision is governed by the California Subdivision Map Act (Government Code §§66410, et seq.), except that Lot Line Adjustments and Parcel Maps are not prohibited by [the covenant]. Lot Line Adjustments shall not result in a net decrease of the land area of the Property. Any parcel map that would be inconsistent with the intention of the parties with regard to the making of [the covenant] or that would result in any condition or circumstance inconsistent with the terms of [the covenant] shall be prohibited.

- There shall be no residential housing units constructed on the Property. The foregoing shall not apply to housing necessary for custodial services, security services, or caretakers necessary in support of the uses permitted by [the covenant]. Such housing shall be attached or adjacent to clubhouse or maintenance facilities and shall be limited to no more than three individual housing units.

- No commercial lodging shall be constructed on the property.

- No unit shall be constructed on the property for transient occupancy purposes as "Transient Occupancy" is defined in Chapter 3.12 of the Town of Mammoth Lakes Municipal Code, and as the same may be amended from time to time.

- The parties retain the right to mutually agree upon additional permitted uses, in addition to that which is set forth elsewhere in [the covenant], for facilities that pertain to arts and cultural activities and forums open to the public; provided that, such uses and facilities are permitted by and consistent with zoning regulations, rules, and ordinances of [the Town], and as the same may be amended from time-to-time.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G of the *CEQA Guidelines*, the proposed project could have a significant environmental impact if it would:

(a) physically divide an established community;

(b) conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect; or

(c) conflict with any applicable habitat conservation plan or natural community conservation plan.

As discussed in the Initial Study that (included as Appendix A to this Draft EIR), no impact would occur with respect to Thresholds (a) and (c). Accordingly, the following discussion focuses on Threshold (b).

Project Characteristics Related to Land Use

The Project consists of adoption by the Town of the Snowcreek VIII, Snowcreek Master Plan Update - 2007 (2007 Master Plan) to revise the Updated Master Plan for Snowcreek at Mammoth (1981 Master Plan). The 1981 Master Plan was an update of the original Snowcreek Master Plan (1974 Master Plan). The 2007 Master Plan addresses proposed buildout of the remaining approximate 237 acres yet to be developed within the Snowcreek Master Plan area (also referred to as "Snowcreek VIII") and is intended to fulfill the vision of the previously approved Master Plans. With the previously adopted Master Plans serving as a basis, Snowcreek VIII is intended to be a well designed community that integrates residential, resort, recreation, retail and public amenities components. Snowcreek VIII would also enhance some existing components of the Snowcreek Master Plan area, such as the expansion of the Snowcreek Golf Course.

As described in detail in Section III, Project Description, of this Draft EIR, the Project proposes the following land uses on the Project site (refer to Figure III-4 in Section III, Project Description, of this Draft EIR):

- **Hotel.** A 400-suite Hotel including 250 Hotel room/suite units and 150 Private Residence Club (PRC)/suite units on APN 40-070-11 in the central portion of the site. The Hotel would include approximately 212,500 square feet of Hotel rooms/suites, 127,500 square feet of Private Residence Club (PRC)/suite units, and 100,225 square feet of back of house/Hotel operations.

- **Condominiums.** The Project would include 850 multi-family townhome units and condominium units on APN 40-070-11 in the central portion of the site. The residential units would range in size from 650 to 3,500 square feet. Housing density for the Project site was calculated by dividing the total number of dwelling units by the total number of acres in the Project. Overall housing density for the Project would be approximately 7.35 dwelling units/acre (1,050/143). Eighty on-site dwelling units would be designated as for-sale workforce housing.

- **Resident's Club.** An 8,000 square foot Resident's Club consisting of a snack bar, pool, spa, fitness facility, kitchen, bar, and outdoor barbeque/cabana would accompany the 850 multi-family condominium and townhome units. This facility would be located in the northern portion of the site near Fairway Drive and would also accommodate the rental office/facility management offices.

- **Golf Course Expansion.** The existing nine-hole golf course on the west and north portions of the Project site would be expanded to include nine additional holes on the east and south edges of the site, creating an 18-hole golf course. The expanded golf course would encompass approximately 155 acres. The course would be designed to conserve water and improve the use of native vegetation. The existing nine-hole course may be modified, and the existing temporary club house located in the northern portion of APN 40-70-11 will be removed. An approximate 3,000 square foot golf pro shop and lounge/grill will be built. The new portion of the golf course and possibly the existing course would be re-graded and contoured to created topographic undulations in character with the surrounding landforms fronting the main range.

- **Golf Pro Shop.** A 3,000 square foot golf pro shop and lounge/grill which would replace the existing temporary club house located in the northern portion of APN 40-70-11.

- **Outfitters' Cabin.** A 1,700 square foot Outfitters' Cabin near the eastern boundary of APN 40-140-04. The Outfitters' Cabin would provide public parking and would serve as the hub of summer and winter activities such as hiking, biking, fishing, cross country skiing, snow-shoeing, hay rides, and sleigh rides. Retail services and equipment rental would be provided to serve these types of activities.

- **Market/General Store (Store), and Natural Resources and Historic Interpretive Center (Interpretive Center).** This portion of the Project would include: a 900 square foot Interpretive Center; a 3,500 square foot Store; and associated surface parking located on a small portion of APN 40-040-20 (the parcel north of Old Mammoth Road and west of Minaret Road).

Project Consistency with Plans and Policies

CEQA requires an analysis of consistency with plans and policies as part of the environmental setting (see *CEQA Guidelines* Section 15125). An EIR uses the policy analysis as an indicator of the resources that might be affected by a project and considers the importance a policy gives a resource in determining the significance of the physical impact. Conversely, the EIR considers the potential significance of the related physical impacts when analyzing a particular policy. Inconsistency with a policy may indicate a significant physical impact, but the inconsistency is not itself an impact. Using this approach, this EIR provides a detailed analysis of policies of the 1987 General Plan, 2007 Draft General Plan, and analyses of other applicable plans (such as the 1981 Master Plan, Air Quality Management Plan, Inyo National Forest Land and Resource Management Plan, and Mono County Local Transportation Commission) and policies so that the decision-makers may determine project consistency. The physical impacts of the Project are analyzed in other sections of the EIR.

The General Plan Guidelines published by the State Office of Planning and Research defines consistency as, "An action, program, or project is consistent with the General Plan if, considering all its aspects, it will further the objectives and policies of the General Plan and not obstruct their attainment." Therefore, the

standard for analysis used in the EIR is based on general agreement with the policy language and furtherance of the policy intent (as determined by a review of the policy context). The determination that the Project is consistent or inconsistent with the 1987 General Plan and 2007 Draft General Plan policies or other Town plans and policies is ultimately the decision of the Town.

Town of Mammoth Lakes 1987 General Plan

The current land use designations on the site are Resort, Open Space, and Open Space Stream Corridor overlay. Portions of the site south of Old Mammoth Lake Road are designed Resort and Open Space. The portion of the site north of Old Mammoth Road is designated as Resort (R) with an Open Stream Corridor Overlay (OSSC).

Portions of the site designated as Resort (R) would be developed with a luxury Hotel (including retail uses, restaurant, fitness/wellness center, pool, and ice rink/pond); low-, medium-, and high-density residential uses, Golf Clubhouse, and a Resident's Club. The R designation is generally applied to large parcels capable of providing a complete resort experience. The Project proposes mixed uses consistent with a mountain resort experience, including visitor lodging, recreational amenities, and commercial services that support the resort atmosphere. The Project includes pedestrian paths and walkways linking various residential and commercial land uses throughout the site and provides a functional and distinctive pedestrian-scaled environment. The Project would also provide linkage of Project site trails to the Town-wide recreational trail network. In addition, workforce housing is allowed within the major resort developments. The Project would be consistent with the types of uses proposed in the R designation as described in the 1987 General Plan.

Lot coverage for the R designation is limited to a maximum of 50 percent overall to provide space for outdoor recreation amenities. Lot coverage for the Project would be 24.7 percent for the Project area (minus the Golf Course expansion) or 15 percent for the entire Project, including the Golf Course. Therefore, lot coverage under the Project would be consistent with the R designation. The maximum density is eight units per acre. Densities may be clustered within individual Resort developments. Residential density may be increased pursuant to state law. The Project proposes residential development with a density of 7.35 dwelling units per acre for the Project area and 6.36 dwelling units per acre for the entire Snowcreek Master Plan area. The density would be consistent with the allowable density for the R designation as defined in the 1987 General Plan. Land uses and density proposed by the Project are consistent with the current General Plan designations and the Project would be consistent with the 1987 General Plan land use designation for the Project site.

Portions of the Project site designated as Open Space (OS) would be developed with a golf course and the Outfitters' Cabin. The OS designation is applied to lands that have significant recreational or environmental values and permits development of facilities that support the environmental and recreational objectives of the community and may include recreation facilities such as parks, athletic fields, golf courses, and community gathering spaces. The Project proposes expansion of the Golf

Course, a use which would be consistent with the OS designation as described in the 1987 General Plan. The Outfitters' Cabin would serve as a portal to the many outdoor activities available on public lands south and east of Sherwin Creek Road, including the Sherwin Range. As a portal, the Outfitters' Cabin would provide trail head access, public parking, and would offer equipment for sale/rental for various outdoor activities. The Outfitters' Cabin would serve as the hub of year round off-site activities such as hiking, biking, fishing, cross country skiing, snow-shoeing, hay rides and sleigh rides and would support the recreational objectives of the community and be consistent with the OS designation.

The Market/General Store (Store) and Natural Resources and Historic Interpretive Center (Interpretive Center), proposed north of Old Mammoth Road, would be located on areas designated as R and Open Space Stream Corridor (OSSC) overlay. The development would not go beyond the wetland delineation line verified by the United States Army Corps of Engineers (see Figure III-5 in the Project Description section of this Draft EIR). The OSSC overlay does not prohibit development and the uses allowed would be the same as the underlying designation (R). The Interpretive Center would support the environmental and recreational objectives of the community by educating the public about the natural resources and recreation available in the area. The Store would be similar to the historic Lutz Market, which served the community during the early settlement days of Mammoth Camp. It is intended to serve residents and visitors throughout the "Old Mammoth" area of the Town. Therefore, the Project would be consistent with the R and OSSC land use designations as described in the 1987 General Plan.

Additionally, the Project proposes a 1987 General Plan Amendment to remove the Sherwin Ski Bowl from the Snowcreek Master Plan. If the General Plan Amendment is approved, all uses proposed under the Project would be consistent with the General Plan designations on the site. Project consistency with individual 1987 General Plan policies is evaluated in Table IV.H-2 at the end of this section.

Town of Mammoth Lakes 2007 General Plan

The 2007 General Plan also designates the Project site as Resort (R) and Open Space (OS). The 2007 General Plan allows a density of 6 to 8 dwelling units per acre, and 12 to 16 hotel rooms per acre. The Project proposes residential development with a density of 7.35 dwelling units per acre for the Project area and 6.36 dwelling units per acre for the entire Snowcreek Master Plan area. The density would be consistent with the allowable density for the R designation as defined in the 2007 General Plan. Therefore, the Project would be consistent with the R designation in the 2007 General Plan.

Allowed uses under the OS designation in the 2007 General Plan are the same as defined in the 1987 General Plan. The OS land use designation would be slightly modified in the 2007 General Plan so that all lands within the Town's Urban Growth Boundary (UGB) that were designated OSSC in the 1987 General Plan are combined under the OS designation in the 2007 General Plan.

There is no General Plan amendment required under the 2007 General Plan. Allowed land uses on the Project site are identical between the 1987 General Plan and 2007 General Plan; therefore the Project would be consistent with allowed land uses as described in the 2007 General Plan.

1981 Snowcreek Master Plan

The original 1974 Master Plan proposed development of 2,400 dwelling units on 355 acres, 150,000 square feet of commercial space, and a one-acre service station. Three development phases were completed under the 1974 Master Plan consisting of 17 percent of the total planned number of units. The 1974 Master Plan was updated and revised in 1981. The 1981 Master Plan proposed revisions to the 1974 Master Plan by reducing the number of proposed dwelling units from 2,400 to 2,332, and proposing additional land uses including a church site, employee housing, a nine-hole golf course and athletic club, and roadway improvements.

The Project proposes revisions to the previously adopted 1981 Master Plan. These revisions only address proposed land uses for the remaining 143 acres yet to be developed under the 1981 Master Plan and incorporates the 94 acres from the 2005 Land Exchange for the Golf Course expansion (combined acreage is 237). The Project would complete the build-out of the Snowcreek Master Plan area with complementary land uses that integrate residential, resort, recreation retail, and public amenities on the site. The Project would differ from the 1981 Master Plan by:

- proposing 137 fewer residential units in the overall Master Plan area (345 acres),
- proposing a transfer of un-used density within the Master Plan area to achieve 187 more units in the Project area,
- reducing commercial land uses (from 150,000 square feet to 75,000 square feet), and
- expanding the existing nine-hole Golf Course in place of development of the Sherwin Ski Bowl.

It has been over 25 years since the last update of the Snowcreek Master Plan and changes have occurred economically and demographically in the Town. The proposed changes to the 1981 Master Plan would incorporate shifts in land use based upon recent resort trends and local conditions as well as revisions to the final phase or phases of the 1981 Master Plan. These proposed changes would be consistent with the existing land use designations on the Project site and would be consistent and compatible with uses proposed in the 1981 Master Plan. Therefore, the Project proposes changes to land use that would represent a fine tuning of proposed development to meet needs of the community and would be consistent with the 1981 Master Plan.

Town of Mammoth Lakes Zoning Regulations

The Project proposes two amendments to the Zoning Code– 1) building height for hotel and 2) transfer of un-used density within the master plan area. The current zoning designations on the site are Resort (R) and Open Space (OS). The portion of the site north of Old Mammoth Road is designated as Resort with an Open Stream Corridor Overlay (OSSC).

Portions of the site zoned as R would be developed with a hotel (including retail uses, restaurant, Fitness/Wellness Center, pool, and ice rink/pond); low-, medium-, and high-density residential uses, Golf Clubhouse, and a Resident's Club. The purpose of the R zone is to provide for the development of parcels as coordinated, comprehensive projects while allowing for diversification of land uses and to allow development of various types of land uses such as: single-family residential developments, multiple housing projects, professional and administrative office uses, hotels including attendant support, commercial activities, recreational facilities, public or quasi-public uses, or combinations of such uses through the adoption of a development plan and text materials which set forth land use relationships and development standards.

Uses permitted under the R zone include the continuation of all land uses which existed in the zone at the time of adoption of the original development plan or those uses designated on the development plan for the particular property as approved by the Town Council. The Project proposes uses that are a continuation of the land uses adopted with the original Master Plans (1974 and 1981). The Project proposes residential development with a density of 7.35 dwelling units per acre for the Project area and 6.36 dwelling units per acre for the entire Snowcreek Master Plan. The maximum permitted density under the Zoning Code is eight dwelling units per acre; therefore the Project would be consistent with the uses and density as allowed under the R zone. Additionally, lot coverage for the Project would be 24.7 percent for the Project area (minus the Golf Course expansion) or 15 percent for the entire Project, including the Golf Course. Therefore, lot coverage under the Project would be consistent with the R zone.

The portion of the site zoned as OS would be developed with the Golf Course expansion and the Outfitters' Cabin. These uses are consistent with uses allowed in the OS zone and which permits public or private parks, passive recreational facilities, historical landmarks, agricultural activities, ski area development and stables, and other recreational uses and facilities.

The portion of the site designated as R and OSSC would be developed with the Store. Permitted uses in the OSSC are controlled by the underlying designation for the site. Therefore, the Store would be consistent with the underlying OS zoning. Therefore, the Project would be consistent with all permitted zoning uses, including densities as described in the Town's Zoning Code.

In the R zone, performance and environmental standards are specified in the development plan or Zoning Code, but shall be not less than those specified for similar uses in the residential or commercial zones.

For commercial structures, no portion of any building shall exceed thirty-five feet in height at any point beneath the structure to the roof of the building above that point. However, for any commercial structure where the majority of the ground floor is devoted to understructure parking, the planning commission may approve an increase in height of up to ten feet subject to a use permit. The Project includes understructure parking; therefore, the permitted height is 45 feet. The Hotel height is undetermined at this point, but may not exceed 120 feet in height. Therefore, the height of the Hotel (if in excess of 45 feet) would be inconsistent with the Town's zoning regulations.

Air Quality Management Plan

Mono County, along with Inyo and Alpine Counties, is situated within the Great Basin Valleys Air Basin, which is managed by the Great Basin Unified Air Pollution Control District (GBUAPCD), which serves to enforce Federal, State, and local air quality regulations, and ensure that standards are met. The Town adopted its own Air Quality Management Plan (AQMP) as of November 1990 to provide a means to address increased Particulate Matter (PM) emissions in the winter due to a combination of increased tourism, greater number of motor vehicles, and smoke from wood burning stoves and fireplaces. Of special concern are particles that measure less than 10 microns in diameter (about 1/7th the thickness of a human hair), known as respirable particulate matter (PM_{10}), which can be inhaled and lodge in the lungs. The AQMP analyzes sources of PM_{10}, potential impacts, and the effectiveness of control measures.

Based on the analysis of the Project's impacts on air quality (see Section IV.C, Air Quality), and through compliance with the proposed mitigation measures, Project impacts to air quality during construction would be significant (a temporary impact) and operational impacts would be less than significant and would not result in an increase of particulate mater (PM_{10}). Additionally, modeling of the pollutant emissions associated with the Project shows that the long-term operation of the Project would not result in an exceedance of ozone (O_3) precursor emissions or of the 1-hour or 8-hour Federal or State standards for carbon monoxide (CO). Therefore, the Project would be consistent with both adopted GBUAPCD policies and the Town's AQMP.

Inyo National Forest Land and Resource Management Plan

The California Wilderness Act of 1984 transferred the administration of approximately 23,000 acres of land within the Mono Basin National Forest Scenic Area from the Bureau of Land Management to the Inyo National Forest. The boundary of the Inyo National Forest includes 2,046,346 acres, 116,591 acres of which are in non-federal ownership. Land adjacent to the Urban Growth Boundaries of the Town of Mammoth Lakes is public land falling under the jurisdiction of Inyo National Forest and administered for recreational use. The Sierra Nevada Forest Plan amendment of 2001 updated the Inyo National Forest Plan of 1988, therefore consistency with Forest Service goals and policies will be considered.

Management of natural resources within the Inyo National Forest is being addressed by the U.S. Forest Service through planning efforts including the USFS Trail and Commercial Pack Stock Management in

the Ansel Adams and John Muir Wildernesses FEIS and the Inyo National Forest Winter Needs Assessment prepared in collaboration with the Town of Mammoth Lakes in 2003 and 2004.

The 2007 General Plan, adopted August 15, 2007, includes policies requiring the Town to work closely with agencies, including the Inyo National Forest, to ensure that the regional natural ecosystem is maintained. Therefore, the Project is consistent with the Inyo National Forest Land and Resource Management Plan. This is discussed in more detail in section IV.D (Biological Resources) of this Draft EIR.

Mono County Local Transportation Commission (MCLTC)

The Mono County Local Transportation Commission (MCLTC) is the designated Regional Transportation Planning Agency for Mono County. Its membership includes three members of the Town of Mammoth Lakes Town Council and three members of the County Board of Supervisors. The Director of Caltrans District 9 serves as an ex-officio member of the MCLTC. The MCLTC acts as an autonomous agency in filling the mandates of the Transportation Development Act.

The goal of the Mono County Regional Transportation Plan (Transportation Plan) is to provide and maintain a transportation system which provides for the safe, efficient and environmentally sound movement of people, goods and services, and which is consistent with the socioeconomic and land use needs of Mono County.[3] The Transportation Plan includes the existing highway and road system, as well as the bikeway/trail component and air travel.

Senate Bill 45 expanded the role of the MCLTC with additional responsibilities for project monitoring with significant, additional and discretionary funding for transportation projects and increased transportation planning responsibilities. The primary duties of the MCLTC consist of the following:

- Every four years, prepare, adopt and submit a Regional Transportation Plan (RTP), and every two years prepare a Regional Transportation Improvement Program (RTIP) for the Department of Transportation (Caltrans) and the California Transportation Commission;
- Annually, review and comment on the Transportation Improvement Plan contained in the State Transportation Improvement Program (STIP);
- Provide ongoing administration of the Transportation Development Act (TDA) Funds.
- Annually, prepare and submit the Overall Work Program; and

[3] *Mono County Local Transportation Commission Website, retrieved July 5, 2006, from http://www.monocounty.ca.gov/cdd%20site/LTC/ltc_home.html.*

- Periodically allocate funds for Transportation Enhancement Activities (TEA).

Although the MCLTC does not currently have any adopted policies, as noted in Section IV.M, Transportation/Traffic, of this Draft EIR, the Project would not conflict with adopted policies, plans, or programs supporting alternative transportation.

Lahontan Regional Water Quality Control Board (LRWCB)

The Mammoth Community Water District (MCWD) provides service to the residents from both surface water appropriated from Lake Mary, and groundwater from the Mammoth Basin Watershed. The MCWD falls under the jurisdiction of the Lahontan Regional Water Quality Control Board (LRWCB), which has developed a Water Quality Control Plan for the Lahontan Region.

Additionally, the MCWD adopted a Groundwater Management Plan in July of 2005, which is thoroughly discussed in the December 2005 update to the Urban Water Management Plan.

The Project would be required to conform to the policies and guidelines concerning land development in the Mammoth Lakes area above 7,000 feet elevation as prescribed in the Water Quality Control Plan for the Lahontan Region (for additional detail, see Section IV.G, Hydrology/Water Quality, of this Draft EIR). Additionally, the Project would further water conservation goals promoted by the MCWD by possibly utilizing the MCWD's tertiary water system when it comes online to satisfy the irrigation needs of the Golf Course, thereby potentially freeing up potable water that could be used to meet other future needs for the Town.

Project Impacts and Mitigation Measures

Impact LU-1 Consistency with Applicable Land Use Plans, Policies, or Regulations

As noted, the Project is generally consistent with and implements applicable plans and policies. The Project site is currently governed by the land use policies and regulations set forth in the General Plan (1987 and 2007 General Plan), the Snowcreek Master Plan (adopted in 1974 and amended in 1981) and the Town of Mammoth Lakes Zoning Ordinance. Table IV.H-2 compares the Project characteristics with the applicable land use polices outlined in the 1987 General Plan.

As noted, the 1987 General Plan is in the process of being updated and a 2007 General Plan was adopted August 15, 2007. Once the General Plan Program Final EIR is certified, the 2007 General Plan would replace the 1987 General Plan as the controlling land use document for the Town's envisioned use of the Project site. For comparative purposes, Table IV.H-3 evaluates the Project's consistency with the applicable land use polices outlined in the current version of the 2007 General Plan (with the exception of policies related to aesthetics and visual resources, which are presented in Section IV.B, Aesthetics).

As discussed in Table IV.H-2 and IV.H-3, the Project would be generally consistent with the applicable policies in the 1987 General Plan, the 2007 General Plan, and Town Zoning Ordinance. Thus, Project impacts to land use would be ***less than significant.***

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
LAND USE AND PUBLIC FACILITY AND SERVICES ELEMENT	
General Land Use Policies	
1. In furtherance of the Overall Goals set forth above and the General Goals of the General Plan listed on Page 6, it is the policy of the Town that the developable land area designations (all areas not designated Open Space) set forth in this plan and the overall development intensity described herein are to be the ultimate size and intensity for the community and no intensive development (housing, commercial, or industrial) shall take place outside the area designated for such development in this plan.	**Consistent.** Development of the Project would take place within an area designated for Resort (R) development. The Resort designation includes mixed visitor oriented uses including lodging, visitor oriented commercial, and recreation uses. The proposed uses are in accordance with the allowable uses for the Resort designation. The Project proposes 7.35 dwelling units per acre, including hotel units, which is in accordance with the maximum allowable density of eight units per acre for the Resort designation. The Project would not exceed the maximum allowable lot coverage of 50 percent for the Resort designation established in the 1987 General Plan.
2. The Town shall use Specific Plans to refine Land Use District Plans as needed and shall prepare Program Environmental Impact Report documents to guide Specific Area Plan Development and to reduce repetitive project level environmental documentation.	**Consistent.** The Project is subject to and proposes a Master Plan Amendment providing for the completion of a master planned community including residential neighborhoods, commercial uses, hotel/resort uses, recreational amenities, and a trail/roadway system. However, due to changes proposed in the updated 2007 Master Plan a new project-level environmental analysis is required.
3. The Town shall evaluate each District Plan, Specific Area Plan, and development proposal to assure that a balanced expansion of all major land use types occurs, and is coordinated with commercial recreation development.	**Consistent.** The Project proposes several major land use types including residential, commercial, retail, recreation, and hotel/resort uses. The Project would integrate a mix of residential types within distinct neighborhood contexts. Additionally, the Project would include multiple options for recreational amenities. The Project is subject to multiple reviews by the Town including: environmental review pursuant to CEQA; design review by the Town Community Development Department, other departments and divisions, and outside agencies; consideration by the Town Planning Commission; and ultimate consideration by the Mammoth Lakes Town Council. The extent to which the Project proposes a balanced expansion of all major land use types, coordinated with commercial recreation development, would be contemplated by each of the abovementioned entities during their respective periods of Project review and/or consideration.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
Residential Land Use Policies	
1. The Town shall encourage recreation visitor and commercial recreation-employee housing to be located in or near commercial centers, major recreation nodes (such as ski-base areas, golf courses and transit hub), through incentive and disincentive policies.	**Consistent.** The Project proposes construction of a variety of recreation visitor and commercial recreation-employee housing. Proposed residential uses include low-, medium-, and high-density residential development (condominiums and townhomes), a Private Residence Club (PRC)/suite units, and hotel accommodations. Of the residential development, 80 units would be allocated as workforce housing. The Project would expand an existing recreation node (Golf Course) in proximity to the proposed residential uses, with multiple options for recreational amenities including the expanded Snowcreek Golf Course, Resident's Club, and Outfitters' Cabin (providing outdoor equipment rental and trail head access/parking). The Project also proposes 75,000 square feet of commercial space.
2. Developments shall be encouraged (but not required) through incentives in the Development Code to provide employee housing on-site or where on-site provision is infeasible to provide such housing off-site, or if appropriate, contribute to an employee housing development fund.	**Consistent.** The Project includes the development of 80 units of workforce housing on-site with the balance of required workforce housing provided off-site.
3. The Town shall encourage compact/clustered residential development and increased open space areas in non-single family areas, through criteria and incentives/disincentives.	**Consistent.** The Project is organized into a series of clustered residential neighborhoods (including low-, medium-, and high-density residential development) interspersed among outdoor use/open space areas, commercial and resort uses, and recreational amenities. The Project would provide for sensitive transitions between residential and other land uses through open space dedication and design.
5. The Town shall allow residential uses in commercial areas to provide housing opportunities for employees within the commercial areas.	**Consistent.** The Resort land use and zoning designation allows for the construction of housing near commercial uses.
7. The Town shall develop and apply performance design review criteria for residential areas: 1) to assure that residential development is designed to enhance the Town's mountain resort character 2) to provide for sensitive transitions between residential and other land uses, through open space dedication and design, and 3) to better integrate residential development with a natural environment.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. The Project would cluster medium and higher density residential units in the center of the development area, with lower density residential located adjacent to open space to preserve open space and provide for the transition of high- to low-density uses adjacent to open space areas. The Project would further integrate residential development with a natural environment by emphasizing an architectural style appropriate to the climate and natural setting of the Eastern Sierra. Traditional tools of California architecture would be encouraged, including rugged stone building bases, and expressive detailing at roof edges, balconies, window

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
	trims, and doorways. The goal would be a distinctive building architecture that is executed with materials, colors, and finishes, appropriate to the local environment.
8. The Town shall encourage a diversity of housing types.	**Consistent.** See discussion for Residential Land Use Policy 1, above.
9. The Town shall encourage affordable housing through development incentives, and utilization of federal and state affordable housing programs as appropriate.	**Consistent.** The Project includes the development of 80 units of workforce housing on-site with the balance of required workforce housing provided off-site.
11. The Town shall adopt a zoning ordinance which includes controls on site coverage and population density while allowing flexibility in the types and sizes of residential units to be developed.	**Consistent.** The Project is located in an area designated as Resort (R) and Open Space (OS). The R designation would allow flexible development. The Project includes land use regulations related to permitted and conditional uses, density, building height, right of way (R.O.W.), building setback, building separation, lot size, and site coverage. The Project includes a variety of permitted land uses, allowing for future flexibility in the types and sizes of residential units to be developed in each area (see discussion for Residential Land Use Policy 1, above).
Commercial Land Use Policies	
2. Review criteria for commercial development proposals shall include: adequate site size for the proposed use, snow storage and removal, snow shedding, and an analysis of the relationship to the Town's transportation and other facilities and services including assurance of adequate access and on-site circulation. Utilization of the natural features of the site, a beneficial relationship to other land uses, and adequate landscaping and buffering shall be required.	**Consistent.** The Project is consistent with the underlying commercial design concepts expressed in this policy. The Project would include designs for snow storage, removal, and shedding that are in compliance with the Town's Zoning Code requirements. The Project's relationship to the Town's transportation facilities and the adequacy of Project access and on-site circulation are analyzed in Section IV.M (Transportation/Traffic) of this Draft EIR. As discussed therein, the Project would not result in significant impacts related to traffic, access, or on-site circulation. As discussed in Sections IV.K (Public Services) and IV.N (Utilities/Service Systems) of this Draft EIR, the Project would not result in significant impacts to other public services and facilities provided by the Town, including police and fire services, schools, parks, libraries, and water, sewer, and solid waste facilities. Landscape site work would be consistent with traditional approaches for the region, would address current needs, codes, regulations, and environmental considerations; would enhance the user experience, safety, and enjoyment; and would contribute to adequate buffering as needed. With respect to the visual relationship between on-site land uses, see discussions for Residential Land Use Policies 3 and 7, above.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
3. The Town shall review proposed commercial developments and apply incentives and disincentives in the Development Code to achieve a balance between the commercial needs of visitors and permanent residents.	**Consistent.** The Project would include commercial uses for both residents and visitors. Proposed uses such as the Store and Outfitters' Cabin will be available to both residents and visitors.
7. The Town shall assure that commercial uses are compatible with Mammoth Lakes livability and environment (e.g., non-disruptive due to traffic, noise, pollution, or other impacts and designed appropriately for the site and environmental constraints) through the application of design review criteria and development incentives in the Town Development Code: a) The architectural design of existing and future commercial structures shall be encouraged to be in keeping with the alpine character of the area, and b) Commercial developments shall be encouraged to be constructed in compact centers, rather than in strip commercial areas or among non compatible uses.	**Consistent.** As discussed in Sections IV.M (Transportation/Traffic), IV.I (Noise), and IV.C (Air Quality), Project specific impacts would be less than significant in relation to traffic congestion, noise, and air pollution (respectively). With respect to other pertinent issues, the Project's compatibility with and impact on the surrounding environment is analyzed throughout this Draft EIR. With respect to the preservation of the alpine character through architectural design, see discussion for Residential Land Use Policy 7, above. The Project would be a Master Planned community consisting of a variety of land uses (including commercial uses) which would be designed and sited in a manner that emphasizes cohesiveness and compatibility between uses.
8. The Town shall determine the types of retail and service commercial developments which are needed to serve the Town's permanent population, and encourage their development through incentives in the Town's Development Code.	**Consistent.** The Project would provide a broad range of activities, services, and facilities for residents and visitors year round. See discussion for Residential Land Use Policy 1, above.
Recreation and Resort Land Use Policies	
1. The Town shall encourage year-round visitors by providing incentives in the Development Code for recreation and visitor housing developments to provide resort amenities and recreation activities such as tennis courts, athletic clubs, skating rinks, golf courses, riding and hiking trails , etc.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy of providing visitor housing and recreation amenities. See discussion for Residential Land Use Policy 1, above.
2. The Town shall encourage resort and resort-related development such as recreation facilities, hotel/motel facilities, and recreation-related commercial projects at designated recreational activity nodes through incentives in the Town's Development Code.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of providing recreation and resort amenities. See discussion for Residential Land Use Policy 1, above.
3. The Town shall improve visitor-Town relations by designating a site for a visitor's center in the community.	**Consistent.** The Project would contribute to the improvement of visitor/Town relations by providing both an Interpretive Center, and an Outfitters' Cabin, which would provide outdoor equipment rental and sales, parking, and trail head access. These amenities would provide visitors with information about the Town and Project area and the various recreational amenities available.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
4. Each recreation activity node and related development shall have an architectural theme, and a well integrated design plan which encourages visitors to stay in the designated resort nodes.	**Consistent.** See discussions for Residential Land Use Policies 3 and 7, above.
Open Space Policies	
6. The Town shall designate passive and active open space areas in which varying levels of recreation activities are encouraged: - Use of open space areas such as paths, picnic facilities, etc., shall be limited to passive activities. - The Town shall restrict intensive recreational activities to areas designated for active open space uses.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of providing passive and active open space opportunities. See discussion for Residential Land Use Policy 1, above.
General Public Facilities and Services Policies	
1. The Town shall ensure that public facilities planning and construction provide an efficient framework for and are constructed commensurate with community growth.	**Consistent.** As discussed under the "Growth Inducing Impacts" heading in Section V (General Impact Categories) of this Draft EIR, facility construction associated with the Project would be site-specific and would not foster substantial concomitant population growth in the community (e.g., the Project does not propose typical growth-inducing uses such as a major roadway extension or a water treatment plant). As discussed in Section IV.J (Population/Housing) of this Draft EIR, the Project would result in direct population growth associated with the proposed on-site residences, as well as some indirect population growth associated with the jobs that would be provided by the proposed commercial, retail, and recreational uses. The population growth associated with the Project, both direct and indirect, would be consistent with local and regional population and growth forecasts. Thus, the effects of the Project would be commensurate with anticipated community growth.
2. The Town shall consider impacts on community services and facilities prior to approval of development and annexation requests.	**Consistent.** Project impacts on community services and facilities are respectively analyzed in Sections IV.K (Public Services) and IV.N (Utilities/Service Systems) of this Draft EIR.
3. The Town shall require development projects to bear their proportionate share of the costs for needed services and facilities.	**Consistent.** As discussed in Section IV.K (Public Services) of this Draft EIR, the Project applicant is subject to development fees related to schools and parks in order to mitigate potentially significant impacts. As discussed in Section IV.N (Utilities/Service Systems) of this Draft EIR, all necessary utility improvements would be funded by the Project applicant.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
Water Supply Policies	
1. The Town shall only approve development when adequate water supply and fire flows can be demonstrated at the appropriate stage of development as identified in the Development Code. When evaluating available water supply, the Town shall consider water available during a year where precipitation is less than 50% of normal.	**Consistent.** As discussed in Section IV.N (Utilities/Service Systems) of this Draft EIR, the water supply assessment prepared for the Project by the Mammoth Community Water District indicates that adequate water supply, storage, and off-site distribution facilities exist for buildout of the Project. As discussed in Section IV.K (Public Services) of this Draft EIR, all water lines would be sized per Mammoth Community Water District requirements and to provide the required fire flow per Mammoth Lakes Fire Protection District requirements.
2. The Town shall work with the Mammoth Community Water District (MCWD) and other potential water suppliers to provide adequate water. The Town shall support MCWD actions to reduce per capita usage, increase groundwater capabilities and develop additional storage and where feasible, secure additional water rights, initiate, appropriate water reclamation and reuse and possible water importation programs.	**Consistent.** Adequate water supply exists for the Project; therefore the Project is consistent with the underlying concept expressed in this policy of ensuring adequate water supply and water conservation. Additionally, if and when it becomes available, the Project proposes the use of tertiary water for irrigation of the golf course, which would decrease the amount of water required for the Project. Regarding water supply, see discussion for Water Supply Policy 1, above.
3. The Town shall encourage the detailed study of water usage, basin groundwater and additional surface water supply sources by seeking grants for such studies and/or requiring developers to contribute to a water study fund.	**Consistent.** Adequate water supply exists for the Project. A water supply assessment (WSA) was prepared for the Project (see Water Supply Policy 1, above) by MCWD. The WSA considers all currently feasible water supply sources available to the Project.
4. The Town shall require water resource conservation through design criteria in the Town Development Code (see Open Space and Conservation Ordinance policies).	**Consistent.** The Project would include the installation of native plants and would conform to the Town's adopted water-efficient landscape regulations. See discussion for Water Supply Policy 2, above.
5. The Town may only permit development which can show that the provision of water service is coordinated with the provision of other public facilities and services.	**Consistent.** See discussions for Water Supply Assessment Policy 1, above.
6. The Town shall ensure water system improvements are made with the least disruption to the environment and community through its reviewing powers.	**Consistent.** Refer to mitigation measures in Section IV.N.
Waste Water Management Policies	
2. The Town shall monitor growth trends and sewer tap requirements to assure development does not exceed the capacity of sewage lines and facilities. The Town shall encourage the MCWD to have adequate sewage capacity available when needed.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of ensuring adequate sewer capacity and treatment. As discussed Section IV.N (Utilities/Service Systems) of this Draft EIR, sewer infrastructure and treatment plants have adequate capacity to serve the Project upon buildout.
3. The Town shall permit only that development which can be adequately accommodated by the sewage facilities and lines, through conditions in the Town Development Code.	**Consistent.** See discussion for Waste Water Management Policy 2, above.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
4. The Town shall encourage MCWD to research the use of reclaimed and non-potable water and developers shall be encouraged to use reclaimed or non-potable water, if available.	**Consistent**. The Project would utilize reclaimed and non-potable water to irrigate the Golf Course, if and when it becomes available through MCWD.
Storm Drainage System Policies	
1. The Town shall implement the Storm Drainage Master Plan.	**Consistent.** As discussed in Section IV.G (Hydrology/Water Quality) of this Draft EIR, the proposed drainage plan has been designed in accordance with the standards and requirements set forth in the Town's Storm Drainage Master Plan.
2. The Town shall through requirements in the Town Development Code, assure that development projects provide the necessary on and off site drainage facilities and erosion control measures which assure that Mammoth Creek and other properties are not significantly affected by development runoff.	**Consistent.** As discussed in Section IV.G (Hydrology and Water Quality) of this Draft EIR, the Project would not result in significant impacts related to on- or off-site drainage issues, including drainage system capacity, erosion, and runoff water quality.
School Policies	
2. The Town shall assure that proposed developments pay appropriate school development fees or dedicate other appropriate items (e.g., sites, facilities, etc.) through requirements in the Town Development Code.	**Consistent.** As discussed in Section IV.K (Public Services) of this Draft EIR, the Project applicant is required to pay school developer fees levied by the Town pursuant to Section 17620 of the California Education Code.
Community Resident Recreation Facility Policies	
2. The Town shall encourage developers to provide not only project-related recreation facilities, but public recreation facilities, including playfields, parks and trails, through requirements and conditions in the Town Development Code.	**Consistent.** The Project would provide not only project-related recreation facilities, including the Snowcreek Golf Course, Swim Club, and Outfitters' Cabin, but would also provide access to publicly-accessible recreational trails.
3. The development of resident recreational facilities shall be coordinated with both public and private visitor recreation facility development.	**Consistent.** See discussion for Residential Land Use Policy 1, above, and discussion for Community Resident Recreation Facility Policy 2, also above.
Fire Protection Policies	
2. The Town shall require development projects to conform to the Mammoth Lakes Fire Protection District Plan project design and fire suppression programs, through conditions and requirements in the Town Development Code.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other Town departments and divisions, and outside agencies. All roadway designs would be reviewed by the Town for adequate roadway standards and emergency vehicle access. As discussed in Section IV.K (Public Services) of this Draft EIR, the Project would conform with design and fire suppression standards and requirements in the Mammoth Lakes Fire Protection District Plan. In addition, the Project is consistent with the Mammoth Lakes Fire Protection District Fire Code regarding maximum building heights of up to 120 feet. Furthermore, the analysis in Section IV.K concludes that the Project would not create any undue fire hazard related to design, fire flow, emergency access/response time, or fire hazards.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
3. The Town shall implement a roadway improvement program to improve the access of fire fighting equipment and to reduce response times.	**Consistent.** See discussion for Fire Protection Policy 2, above.
Police Service Policies	
1. The Town shall provide police protection and services sufficient to provide for the community's present security and safety needs.	**Consistent.** As discussed in Section IV.K (Public Services) of this Draft EIR, the Mammoth Lakes Police Department would have sufficient resources to adequately satisfy the Project's demand for police protection service in addition to the existing demand for such service in the community.
Street and Road Maintenance Policies	
4. The Town shall prepare a Snow Removal and Storage Plan which: - Designates appropriate snow storage areas - Sets priorities for roadway, pedestrian path and trail clearance - Encourages the upgrading and dedication of private roads and pedestrian pathways into the public snow removal system - Establishes requirements in the Town Development Code for appropriate off-street parking areas, snow storage, and snow handling design requirements (such as covered sidewalks, snow loading design and roof design) for development projects, and - Sets forth a snow removal financing program.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. All roadway designs would be reviewed by the Town for snow management including areas adjacent to driveways and parking areas, ground level snow storage, and landscape snow shed areas. Ground and roof level snow storage areas would be identified. Landscape snow shed areas would be designated and located adjacent to the base of buildings and would be sized to accommodate the anticipated volumes of snow. Roof forms would be designed in coordination with pedestrian areas at the base of buildings. Snow falling from roofs would be directed to landscaped areas at the base of the buildings or to lower level flat roofs.
PARKING AND TRANSPORATION ELEMENT	
Roadway Design	
1.1 Plan, design, and regulate roadways in accordance with the functional classification system described in this element, as shown in the Circulation Plan. Develop and adopt roadway standards consistent with this Element.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. All roadway designs would be reviewed by the Town for adequate roadway standards and emergency vehicle access.
1.3 Road, sidewalk, and bikeway standards should recognize the Town's climate to enhance functionality and to reduce the long-term maintenance costs of the circulatory system.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. All roadway, pedestrian, and bicycle trails would be reviewed by the Town for functionality in a mountain climate.
1.4 At intersections on arterial roads, ensure that traffic control devices, and other traffic safety and operational improvements are installed for the safe and efficient movement of all types of traffic and pedestrians, and provide levels of service that conform to these policies. Lighting will be evaluated to meet safety standards.	**Consistent.** The Project includes the construction of a traffic roundabout at intersection of Old Mammoth Road/Minaret Road to assist in safe, efficient traffic movements.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
1.6 Use alternatives to the construction of new traffic signals, including modem roundabouts and prohibitions on turn movements where they can be shown to benefit roadway capacity consistent with other community goals.	**Consistent.** The Project includes the construction of a traffic roundabout at intersection of Old Mammoth Road/Minaret Road to improve roadway capacity.
Level of Service	
1.7 Establish and maintain a Level of Service D or better on a typical winter Saturday peak-hour for signalized intersections and for primary through movements for unsignalized intersections along arterial and collector roads. This standard is expressly not applied to absolute peak conditions, as it would result in construction of roadway improvements that are warranted only a limited number of days per year and that would unduly impact pedestrian and visual conditions.	**Consistent.** The Project would include the construction of eastbound right-turn overlap signal phasing at the Minaret Road/Main Street intersection. Installation of this improvement would maintain intersection operations at LOS D.
1.8 Require the preparation of a traffic impact analysis report to identify impacts and mitigation measures for projects that may potentially result in significant traffic impacts. Level of service shall be computed according to the methodology presented in the Highway Capacity Manual. Cumulative impacts shall be modeled assuming full build-out of the General Plan.	**Consistent.** A Traffic Impact Study was prepared for the Project that identified a significant impact at the Minaret Road/Main Street intersection. The Project would include construction of an eastbound right-turn overlap signal phasing at the Minaret Road/Main Street intersection to maintain LOS D.
1.9 In planning the Town's transportation system, strive for a balanced system that provides alternatives to the automobile while still meeting the level of service standards expressed in this Element.	**Consistent.** The Project includes pedestrian and bicycle trails that connect to the broader Town trail system. The Project would also include the construction of bus shelters.
Roadway Network	
1.11 The Town will investigate and, where appropriate, implement steps to address documented and significant "cut through" traffic problems on residential streets.	**Consistent.** The Project would not provide any access to roads that would entice motorists to use Project roadways as "cut through" routes.
1.14 To aid the access of emergency vehicles and the evacuation of residents and visitors, access routes should be provided and maintained to all portions of the community, consistent with the Mammoth Lakes Fire Protection District requirements.	**Consistent.** The Project would provide two points of access to Old Mammoth Road that could be used in an emergency.
Financing of Improvements	
1.17 Require proponents of development proposals to analyze the project's contribution to increased vehicle traffic, transit demand, air quality impacts, and pedestrian/bicycle traffic, and to implement improvements necessary to address the increase. Mitigation of significant project-related impacts may require improvements beyond those addressed by the Town of Mammoth Lakes Capital Improvement Program and the Town of	**Consistent.** A Traffic Impact Study was prepared for the Project that identified a significant impact at the Minaret Road/Main Street intersection. The Project would include construction of an eastbound right-turn overlap signal phasing. The Project applicant would fund the improvements to the intersection.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
Mammoth Lakes Air Quality Management Plan and Particulate Emissions Regulations.	
1.18 Require new development to dedicate right-of-way consistent with adopted road standards. New development, as warranted, shall pay its fair share of roadway, pedestrian, transit, bicycle, and airport improvements.	**Consistent.** Project streets would be privately-owned and maintained and no other right-of-way dedication is required. The Project would contribute to funding of improvements at the Minaret Road/Main Street intersection (the only significant Project-related traffic impact).
Parking	
1.23 Encourage the use of alternative transportation modes, as a means of reducing parking demand.	**Consistent.** The Project includes pedestrian and bicycle facilities that connect to the broader Town trail system. The Project would also include the construction of bus shelters.
1.25 Promote the use of shuttle transit services from development projects to major destinations, in order to reduce parking demand.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy by including the construction of transit stops. The Red Line currently provides bus stops adjacent to the Project site.
Inter-Jurisdictional Coordination	
2.1 Coordinate with service providers to relocate existing overhead utilities underground along existing roadways while restoring the roadways to an "as good or better condition." Require underground utilities in new developments.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. All utilities would be located underground and would be reviewed by the Town for consistency with Design Guidelines.
2.3 New roads and roadway improvements shall be correlated with the guidelines of the Noise Element of The Town of Mammoth Lakes General Plan.	**Consistent.** As noted in Section IV.I. (Noise), the Project would not create impacts from noise or expose persons to noise in excess of the Town's noise standards or policies in the Noise Element.
2.5 Ensure that roadways are no wider than adequate to safely accommodate traffic and bicycle demands, however, adequate right of way shall be provided for safe snow storage, trucking or alternative snow management means have been specifically identified.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. All roadway designs would be reviewed by the Town for adequate right of way for safe snow storage, trucking or alternative snow management practices.
2.6 Consider the modification of street geometry to address documented traffic speed, neighborhood cut-through, or safety issues. Any modification must be carefully evaluated in light of potential emergency response and snow removal impacts.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. All roadway designs would be reviewed by the Town for adequate roadway standards, emergency vehicle access, and snow removal.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
Transit	
3.1 Work with transit providers to provide year-round transit services within and to the Town that are timely, cost effective, convenient, and responsive to growth patterns and to existing and future transit demand.	**Consistent.** The Project includes the construction of transit stops. The Project would include connections to the Mammoth Lakes Transit Red Line and a shuttle service. The Red Line currently provides bus stops adjacent to the Project site.
3.2 Consider the need for future transit facility right-of-way in reviewing and approving plans for development and roadway construction or improvements. Incorporate features to encourage transit and reserve right-of-way for future transit access in plans for new growth areas. Transit right-of-way may either be exclusive or shared with other vehicles.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. All roadway designs would be reviewed by the Town for future transit facility right-of-way, plans for development and roadway construction or improvements, adequate roadway standards, emergency vehicle access, and snow removal. The Project has committed three specific transit enhancements to and from the site. These enhancements include: 1. A revision to the Red Line bus route that includes a stop at the Hotel entrance on the Project site and a return to the original bus route. 2. An exclusive shuttle service provided for hotel guests to Eagle Lodge and the Village/Gondola area. 3. Another three to four shuttle vans to be paid for by the Snowcreek VIII master homeowners association for all residents to use to major visitor stops including Eagle Lodge, the Village, Main Street and Old Mammoth Road commercial.
3.3 Develop transit and parking management strategies that encourage visitors to leave their private vehicles at their lodging property throughout the course of their stay.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy by providing transit stops, pedestrian and bicycle facilities, and adequate parking.
3.7 In the development of both community-wide land use plans and site plans for individual projects, strive to provide a development pattern that supports use of public transit through the clustering of land use density near established transit stops and the provision of convenient pedestrian connections to transit stops.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy by proposing several major land use types including residential, commercial, retail, recreation, and hotel/resort uses near transit stops. Additionally, the Project would provide pedestrian and bicycle connections to transit stops. The extent to which the Project proposes a balanced expansion of all major land use types, coordinated with commercial recreation development, would be contemplated by the Town during Project review and/or consideration.
3.8 Require new development to provide sheltered public transit stops with turnouts where appropriate. Consider development of turnouts in existing developed areas when roadway improvements are made, or as deemed necessary for traffic flow and public safety.	**Consistent.** See response to Policy 1.25.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
Transportation Control Measures (TCM)	
4.2 Provide for the development of a transportation and circulation system that maintains or enhances air quality in and around the Town.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy by mitigating Project impacts to maintain adequate LOS. Additionally, the Project would include facilities that would encourage the use of alternative transportation modes (bicycle and pedestrian facilities, transit stops).
4.5 Require transportation studies for major development projects to address potential use of bicycle routes, pedestrian trails, and public transportation to mitigate traffic impacts.	**Consistent.** A Traffic Impact Study was prepared for the Project that included analysis of bicycle and pedestrian facilities.
4.7 Promote the development of a public transit system that reduces the need for automobile usage, promotes the usage of non-motorized modes of transit, and complements the pedestrian-oriented vision of the Town.	**Consistent.** The Project includes the construction of transit stops. The Project site is currently served for transit by Mammoth Lakes Transit Red Line. The Red Line provides bus stops adjacent to the Project site and provides service to North Village, Snowcreek Athletic Club, and the Main Lodge via Old Mammoth Road, Minaret Road, Chateau Road, Main Street, and Canyon Boulevard. (see 3.2 discussion above)
Non-Motorized Transportation	
5.3 Commercial uses, recreational activity centers, institutional uses, and multi-family residential areas should be linked to the community-wide pedestrian trails network, where feasible.	**Consistent.** The Project would include a pedestrian and bicycle system with interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods.
5.5 New bikeways should be linked with other bikeways and parks, to provide safe continuous routes, wherever feasible.	**Consistent.** The Project would include a bicycle system connecting with existing Town trails and recreational amenities, outdoor spaces and neighborhoods; thereby creating safe continuous bikeways.
5.7 Establish pedestrian and bicycle access standards. Require developers to finance and install pedestrian walkways, equestrian trails, cross-country ski trails, and multi-use trails in new development, consistent with adopted plans and policies, or as appropriate and necessary to address circulation needs.	**Consistent.** The Project would include pedestrian and bicycle facilities. Additionally, the Project would be linked to hiking, cross country, snow shoeing, and mountain biking trails.
5.9 Strive to provide for a variety of non-motorized user experiences.	**Consistent.** The Project would include a pedestrian and bicycle system with interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods. Additionally, the Outfitters' Cabin and trailhead would provide access to hiking, cross country, snow shoeing, and mountain biking trails.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
Development of New Growth Areas	
8.1 Encourage development patterns within the urban limits to provide a variety of land uses, in order to maximize the proportion of trip purposes that can be accommodated by short trips.	**Consistent.** The Project proposes several major land use types including residential, commercial, retail, recreation, and hotel/resort uses. The Project would include multiple options for recreational amenities. This variety of land use types would provide amenities within a compact area.
8.2 Require that transportation systems in new developments be designed to provide residents and employees with the opportunity to accomplish many of their trips within the new development areas and to other major destinations of the Town by walking, bicycling, cross-country skiing, and using public transit.	**Consistent.** The Project would include commercial, residential, and recreational uses connected by a pedestrian and bicycle system both internally and to the Town's trail system. The Project site is currently served for transit by Mammoth Lakes Transit Red Line.
8.3 Promote the development of crosswalks, sidewalks, neck-downs for crosswalks, public sitting areas, pedestrian trails, bike trails, and cross-country ski trails in the new development areas, in order to enhance safety, complement the non-motorized vehicle trails, and promote a pedestrian atmosphere.	**Consistent.** As discussed in Section III, Project Description, the Project would include a pedestrian and bicycle system with interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods.
HOUSING ELEMENT	
1.A The Town shall administer land use regulations to maintain and expand existing housing options.	**Consistent.** The Project is consistent with the Resort General Plan land use designation, which allows for the development of a variety of housing types.
1.B The Town shall administer land use and development regulations to facilitate the development of housing. These regulations shall include incentives for the development of affordable housing.	**Consistent.** The Project would provide 80 units of workforce housing. Additionally, the Project proposes a variety of housing types, which would create homeownership opportunities to a variety of income levels.
2.A The Town shall promote handicapped and elderly access in new housing developments, common areas, and public facilities.	**Consistent.** The Project would be ADA-compliant.
2.B The Town shall maintain zoning which provides for different types of housing throughout the community	**Consistent.** The Project is consistent with the Resort zoning, which permits a variety of housing types.
2.C The Town shall work to eliminate discrimination in housing.	**Consistent.** Public spaces would be designed to be ADA-compliant. The Project would provide housing types (workforce housing, and low-, medium-, and high density housing) to meet the needs of a variety of households.
3.A The Town shall work to assure that all new development is energy efficient.	**Consistent.** The Project would be consistent with this policy by including energy efficient appliances, drought-tolerant landscaping, using recycled water for irrigation of the Golf Course (if it becomes available), and by incorporating the Town's recycling program, thereby diverting solid waste from the landfill.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
CONSERVATION AND OPEN SPACE ELEMENT	
Natural Vegetative Resources	
2. The Town shall inventory and map all natural vegetation with an emphasis on the location and identification of rare, unique and endangered species.	**Consistent.** The Project would not impact rare, unique, or endangered species.
3. Riparian and in-channel vegetation shall be preserved or restored to the maximum extent possible to protect water quality and the wild life habitat associated with riparian corridors, through the application of design criteria and Incentives in the Town Development Code.	**Consistent.** The portion of the Project located north of Old Mammoth Road would avoid Mammoth Creek and would not impact any riparian or in-channel vegetation.
5. Vegetative species which are rare, unique or endangered should be protected from destruction or alteration to their environment which would impair their vigor.	**Consistent.** See response to Policy 2.
7. Sensitive habitat areas shall be protected through open space buffers, fencing and signage, construction of roads, trails and paths away from sensitive areas, and reduction or removal of development densities near sensitive areas.	**Consistent.** The portion of the Project located north of Old Mammoth Road would avoid Mammoth Creek and would not impact any sensitive habitat areas. There are no other sensitive areas on the Project site.
8. Landscaping plantings shall be required to: 1) be of the native plant species they replace, and/or non-invasive, and 2) drought resistant, to the greatest extent feasible, in accordance with design criteria in the Town Development Code.	**Consistent.** The Project would use native plantings that are non-invasive and drought resistant in accordance with design criteria in the Town Development Code.
9. Landscaping plans which require intensive summer irrigation, fertilization and intensive landscaping should be discouraged by design criteria and disincentives in the Town Development Code.	**Consistent.** See response to Policy 8.
10. Motorcycles, all-terrain bicycles, and other vehicles shall be restricted in ecologically sensitive areas.	**Consistent.** The Project does not propose the use of motorcycles, vehicles or bicycles in areas that are not paved.
Wildlife Resources	
1. Through development controls and incentives, the Town shall identify: 1) primary habitat areas which shall be protected from intrusion by development and human activity, and 2) other habitat areas in which the impact of development and human activity will be minimized.	**Consistent.** The Project would avoid riparian habitat of Mammoth Creek to minimize the impact of human development.
2. The Town shall maximize the protection of primary wildlife habitats though public and/or private management programs which include: 1) requiring (encouraging) the construction of active and passive recreation and development areas away from the habitat, and 2) use of fences, or other barriers and buffer zones.	**Consistent.** The Project would avoid riparian habitat of Mammoth Creek to minimize the impact of human development. Approximately 46 acres of potential foraging and resting habitat south of Old Mammoth Road and east of Fairway Drive that may be used by deer in the adjacent holding area would be lost. However, implementation of mitigation measures as described in Section IV.B would reduce this impact to less than significant.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
3. The Town shall minimize the impact of development and human activity on non-primary habitat areas through: 1) retaining of natural vegetation in proposed development areas, 2) providing buffers where necessary and design controls, 3) by enforcing leash laws and providing public information concerning the potential destruction of wildlife by domestic pets, and 4) by clustering development away from these areas to the maximum extent practicable.	**Consistent.** Some Jeffrey pine and lodgepole pine are scattered throughout the basin sagebrush on the Project site. Some trees on the site may meet the minimum size (six inches in diameter) to require approval from the Town prior to removal. However, implementation of mitigation measures as described in Section IV.B would reduce this impact to less than significant. The Project would cluster development in the interior of the site and the Golf Course would serve as a buffer between surrounding open space areas to the east and south and residential/commercial development.
4. The Town shall protect the deer herds and their migration corridors to the maximum practical extent through: a) provision of open space buffers between developments adjacent to migration corridors; b) limited construction of new roads crossing migration routes; and c) modification of existing road impacts to deer migration areas by measures which could include: l) posting signs, 2) limiting driving speeds, and 3) divising channels migrating animals.	**Consistent.** As noted in Section IV.D. (Biology), the Project would not impact any deer migration corridors. Approximately 46 acres of potential foraging and resting habitat south of Old Mammoth Road and east of Fairway Drive that may be used by deer in the adjacent holding area would be lost. However, implementation of mitigation measures as described in Section IV.B would reduce this impact to less than significant.
5. Instream water quality and quantity should be maintained to preserve riparian habitats (see the Water Resources Policies)	**Consistent.** The Project includes retention basins and water quality treatments that would maintain instream water quality and preserve riparian habitats.
Water Resources	
1. The quality and quantity of surface and ground waters should be maintained at acceptable levels as determined by appropriate agencies.	**Consistent.** The Project would be in compliance with all RWQCB regulations.
2. The Town shall retain to the maximum practical extent, primary community water-courses and bodies in their natural state, through criteria in the Town Development Code. Creek corridors should be carefully identified, corridor setbacks established and strict regulations precluding riparian vegetation removal and creek regimen modification should be adopted.	**Consistent.** The Project would avoid Mammoth Creek and would not impact any riparian resources.
3. The Town shall develop a stream corridor preservation plan for the Mammoth Creek corridor. An Open Space Stream Conservation corridor (OSSC) has been designated along the creek (see the Land Use Element).	**Consistent.** The Project would avoid Mammoth Creek and would not impact any riparian resources.
4. The Town shall carefully regulate development encroachment into flood plains and the perimeter of natural water bodies.	**Consistent.** The Project would avoid Mammoth Creek and would not be located in the floodplain of Mammoth Creek. There are no floodplains located on the Project site to the south of Old Mammoth Road.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
Cultural Resources	
2. An archeological and historic site survey shall be conducted for environmental impact reports whenever a critical site(s) might exist within a project area and to the maximum practicable extent any discovered site shall be preserved or treated in accordance with the recommendations in the survey report.	**Consistent.** An archaeological and historic site survey was conducted for the Project.
3. The Town shall strive to ensure that historic and archeologic sites are available to residents and visitors by: 1) establishing funding for historic and archeologic preservation through state and federal grants, private trusts, and donations, 2) actively promoting the Town's cultural resources In cooperation with the Mammoth Lakes, Resort Association and Historic Society and 3) encouraging the provision of publications about and tours of the sites	**Consistent.** The Project includes a Store and an Interpretive Center. The Interpretive Center would include an interactive educational facility, providing residents and visitors with information and exhibits regarding the history and resources of Mammoth Lakes and the Mammoth Creek Corridor. The Store would draw inspiration from the historic Lutz Market during the early settlement days of Mammoth Camp.
SAFETY ELEMENT	
Avalanche Safety	
1. The Town shall require developers to implement appropriate mitigation measures in avalanche areas through requirements in the Town Development Code.	**Consistent.** The potential for rock falls or snow avalanches to occur on the Project site is considered low and no evidence of landslides has been observed.
Snow Shedding	
6. To adopt standards in the Town Development Code which will limit hazards to people and property resulting from snow and ice falling from roofs. These standards could include setbacks, roof orientation, roof construction, and other applicable considerations.	**Consistent.** The Project would incorporate snow management devices and roof drainage systems in the roof and building design, so that snow will not be permitted to shed freely into active pedestrian or vehicular areas.
Flood Zone	
7. No development shall be allowed in Mammoth Creek or other flood hazard area and such areas shall be maintained in open space uses which will not contribute to run off and snowmelt in the hazard area.	**Consistent.** The Project would avoid Mammoth Creek and would not be located in the floodplain of Mammoth Creek. There are no floodplains located on the Project site to the south of Old Mammoth Road.
Fire Protection	
9. The Fire District should minimize the incidence of structural fires by: a) regular inspections by the Fire I District, b) voluntary residential inspections, c) review of new development and remodeling plans in coordination with the Town's Development Review Procedures, and d) institution of public fire education programs.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. The Project would be reviewed by the Town for conformance with Fire District standards. The Project does not exceed Mammoth Lakes Fire Protection District Fire Code regarding maximum building heights up to 120 feet. As discussed in Section IV.K (Public Services) of this Draft EIR, the Project conforms with design and fire suppression standards and requirements in the Mammoth Lakes Fire Protection District Plan.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
	Furthermore, the analysis in Section IV.K concludes that the Project would not create any undue fire hazard related to design, fire flow, emergency access/response time, or fire hazards.
10. The Town shall help assure provision of adequate fire protection services by requiring development to conform to Fire District Plans, ordinances and requirements, and. to provide for tire protection personnel and equipment through requirements in the Town's Development Code, subdivision requirements and ordinances	**Consistent.** See response to Policy 9.
12. The Town shall assist the Fire Department in reducing access land location delays, and in improving fire suppression by requiring: a) business and house numbers to be visibly posted on each structure; b) a Fire District review of proposed development and remodeling projects as part of the Town Development Review Process, to assure proposed structures, roads/access and fire prevention proposals are adequate; c) to the maximum extent feasible, consultation between the Town and Fire District be held before any plans involving street, road, hydrant, water main/supply, or any other improvement affecting fire safety are approved by the Town or submitted for bid; d) incorporation of appropriate site and structure design criteria in the Town Development Code to reduce fire hazards including: fire preventive building design appropriate building location and spacing, adequate access, etc.; e) to the maximum extent possible, consistency between the various Town Codes and Fire Codes; f) a roadway snow removal priority plan based on fire response access to the urbanized areas of Mammoth Lakes during heavy snow conditions.	**Consistent.** See response to Policy 9.
15. Within the municipal boundaries, the Town shall support the policies of the Mammoth Lakes Fire Protection District regarding storage of explosives or chemicals listed as hazardous by the state or federal government and shall prohibit the above ground bulk storage of gasoline, diesel or propane fuels.	**Consistent.** The Project does not propose any storage of gasoline, diesel, or propane fuels on-site.
Geologic Safety	
18. The Town shall require developers to complete a preliminary soils and foundation analysis, and prepare a comprehensive erosion control plan to prevent erosion and siltation of streams in the Community, through conditions in the Town Development Code.	**Consistent.** A geotechnical report was prepared for the Project. Additionally, the Project would include Best Management Practices for grading and construction activities, which would prevent erosion and siltation of streams.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
19. The Town shall require detailed geotechnic studies of sites with slopes of 20% or greater, land slide or liquefaction potential, or other potential geotechnic hazards, through requirements in the Town Development Code.	**Consistent.** A geotechnical report was prepared for the Project to assess the potential for and slide or liquefaction potential, or other potential geotechnical hazards to occur on the Project site.
21. The Town shall encourage grading and foundation plans which minimize excavation. Off-site disposal of soils shall be discouraged, and where excavation is necessary, balanced cut and fill will be encouraged. Further, if excavated soils must be moved off-site, designated borrow pits shall be used and sculpted to fit the surrounding topography. Fill materials shall be extracted from Town designated areas.	**Consistent.** The Project includes understructure parking and would require excavation. Project grading plans will be reviewed by the Town to ensure that off-site disposal is minimized and that cut and fill are balanced on the Project site.
22. Soil erosion and soil transport during construction shall be controlled through requirements in the Town Development Code, including: a) Disturbed soil surfaces covered with mulch or grass until vegetation is re-established and/or permanent surface is overlaid; b) Minimization of exposed graded areas for extended periods through project phasing; c) Sprinkling of disturbed soils; d) Covering, windfencing around or wetting of stockpiled topsoil or dusty building materials; e) Use of wind erosion construction barriers in sites exposed to wind erosion during construction; f) Limitation of construction equipment and vehicle speeds to 5 miles per hour on construction sites; and g) Use of sedimentation basins or ponds to prevent sediment reaching streams and the Town drainage system.	**Consistent.** The Project would include Best Management Practices for grading and construction activities, which would minimize the erosion of soils on the Project site.
25. The Town shall require major developments to prepare and Specific Area Plans to address hazard emergencies such as evacuation, shelter, communication Issues, etc.	**Consistent.** The Project would include the preparation of emergency plans.
Seismic Safety	
26. The Town shall ensure that new development, modernization projects and public works facilities projects will be constructed to reduce structural damage during seismic events through conditions in the Town's Development Code, including: a) The strict enforcement of the Uniform Building Code sections regarding seismic design, grading and excavation; b) Upgrading of utilities serving the development to withstand projected earthquake loadings and/or to shut off utility in case of failure (e.g., gas pressure drop valves), and; c) Requiring detailed geotechnic studies for development sites with liquefaction, landslide and faulting potential	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. The Project would be designed in conformance with the recommendations contained in the Geotechnical Report and to current California Building Code (CBC) requirements, which will reduce the potential for structures on the Project site to sustain damage during an earthquake event.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
to insure appropriate siting and design is utilized in project development.	
29. The Town shall ensure that adequate emergency access is available to evacuate peak populations during emergencies through: a) Designation of an additional emergency access road alignment(s) to accommodate buildout populations; b) Completion of the existing roadway system; and c) Encouragement of continued airport improvements to improve its use for emergency evacuation.	**Consistent.** The Project would include two access points that would be used in the event of an emergency.
Police Services	
35. The Town shall maintain an adequate police force commensurate with increases in Town population and development.	**Consistent.** As discussed in Section IV.K (Public Services) of this Draft EIR, the Town of Mammoth Lakes Police Department would have sufficient resources to adequately satisfy the Project's demand for police protection service in addition to the existing demand for such service in the community.
NOISE ELEMENT	
4.2.1 New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected future levels of noise from transportation noise sources which exceed 60 dB Ldn in outdoor activity areas or 45 dB Ldn in interior spaces.	**Consistent.** As noted in Section IV.I. (Noise), the proposed residential uses within the Project site would not be exposed to traffic noise levels exceeding 60 dB L_{dn} .
4.2.2 Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed 60 dB Ldn within outdoor activity areas and 45 dB Ldn within interior spaces of existing noise-sensitive land uses.	**Consistent.** Project mitigation measures for construction noise are discussed in Section IV.I. (Noise).
4.2.3 New development of noise-sensitive land uses shall not be permitted where the noise level from existing stationary sources exceeds the noise level standards of Table VII.	**Consistent.** Existing stationary sources do not exceed the noise level standards of Table VII (refer to Section IV.I. (Noise).
4.2.4 Noise created by new proposed stationary noise sources or existing stationary noise sources which undergo modifications that may increase noise levels shall be mitigated so as not to exceed the noise level standards of Table VII at noise-sensitive uses.	**Consistent.** Project mitigation measures for noise are discussed in Section IV.I. (Noise).
PARKS AND RECREATION ELEMENT	
1A-1 The Town shall encourage year round visitors by creating incentives in the Development Code for recreation and visitor housing developments to provide resort amenities and recreation activities such as tennis courts, athletic clubs, skating rinks, golf courses, riding and hiking trails, etc.	**Consistent.** The Project includes year-round resort amenities and recreation activities such as a golf course, a wellness and fitness center, ice rink/pond, swim club, trailhead access, and outdoor equipment rental.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
1A-3 The Town shall preserve the resort-alpine character of Mammoth Lakes through the adoption of tree preservation standards which retain heritage trees (i.e., significant stands of old growth trees of unique or heritage quality, and large individual specimens) and groves where reasonable, and retain to the maximum extent feasible, the forest canopy and forested character of the Town. Native tree species should be planted to help offset the loss of trees unavoidably removed during construction (Conservation and Open Space Natural Vegetative Resources Policy #1).	**Consistent.** As noted in Section IV.B (Aesthetics), the Project design would create a scale, form, and mass suited to the resort-alpine character of the site and the adjacent land uses. As part of the approval process, the Town will review the location of the proposed structures, bulk/massing, use of building materials, colors, and landscaping to ensure consistency with the Town Development Code. Landscaping would incorporate native trees and shrubs to revegetate disturbed areas, to buffer or frame views to allow summertime shading of outdoor places, to allow transition in scale and to soften building massing, and to introduce decoration and color into outdoor use areas. Planting on the Project site would use native conifers, deciduous trees, and shrubs.
1B-2 The Town shall include more recreation programs designed specifically for the short duration visitor and second homeowner.	**Consistent.** The Project will provide recreation programs for the short duration visitor and second homeowner.
2A-2 The Town shall retain, to the maximum practical extent, primary community water-courses and bodies in their natural state, through criteria in the Town Development Code. Creek corridors should be carefully identified, corridor setbacks established and strict regulations precluding riparian vegetation removal and creek regimen modification should be adopted.	**Consistent.** The Store and associated facilities would be located away from Mammoth Creek and would not impact any jurisdictional wetland and waters features. Refer to Section IV.D (Biological Resources) for details.
2B-1 The Town shall encourage developers to provide not only project related recreational facilities, but public recreation facilities, including those projects identified in the Needs Assessment like playfields, parks and trails, through requirements and conditions in the Town Development Code.	**Consistent.** The Project provides for some public recreational facilities including sidewalks adjacent to public roadways.
2B-7 The Town shall seek cooperative arrangements with other public and private recreation providers to enable greater use of available facilities for community recreation programs.	**Consistent.** Although the Resident's Club is only available to Snowcreek residents and Hotel visitors, the Project provides for public recreational facilities including the Golf Course, Hotel restaurants, spa and wellness center, meeting rooms, ice-skating pond, trailhead access, and outdoor equipment rental.
2C-1 The Town shall establish an effective trails network which connects frequently used destinations and follows heavily traveled routes. Trails shall be established whenever possible: 1) along scenic routes, 2) between recreation and visitor residential nodes, 3) to public facilities, areas of cultural, educational, recreational and historic interest, and 4) to campgrounds, camping areas, forest and wilderness areas.	**Consistent.** As discussed in Section III, Project Description, the Project would include a pedestrian and bicycle system with interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods.

Table IV.H-2
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
2C-2 The Town shall develop a trails plan and system which provides for bikeway and pedestrian paths for use during summer and ski trails in the winter.	**Consistent.** The pedestrian and bicycle system would include interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods.
2C-5 The Town may require new development and to the extent feasible, existing uses which are redeveloping, to 1) provide non-motorized path easements to develop paths in conformance with an adopted non-motorized transit plan, 2) provide crosswalk striping, and 3) provide lighting for safe pedestrian use of paths.	**Consistent.** The Project would provide non-motorized path easements, crosswalk striping, and lighting for safe use of pedestrian paths.
2C-6 The Town shall enhance the non-motorized path and trail experience by providing for: a) safe and aesthetically placed paths and trails through appropriate\and environmentally sensitive design, b) control of user access to private property through screens, berms, signage, barriers, and enforcing proper trail use, c) amenities for recreational enjoyment such as picnic areas, benches, exercise facilities, where appropriate, d) diverse path and trail activities, e)bicycle racks,\hitching posts and other fixtures designed to promote non-motorized transportation shall be incorporated info commercial uses where appropriate (Transportation 9 Policy S10).	**Consistent.** See response to Policy 2C-5.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
ECONOMY ELEMENT	
Economic Development Policies	
E.1.D Encourage restaurants, retail, entertainment, lodging, and services.	**Consistent.** The Snowcreek Master Plan proposes areas of commercial development including 75,000 square feet of non-residential space including a Store, Interpretive Center, Hotel (including 250 Hotel room/suite units and 150 Private Residence Club [PRC]/suite units), Spa/Wellness Center, retail uses, restaurant, conference and meeting space, Resident's Club, golf course, golf pro shop, and Outfitters' Cabin.
Marketing, Promotion and Special Events	
E.1.L Support diverse arts, cultural, and heritage programming, facilities and development of public venues for indoor and outdoor events.	**Consistent.** The Project proposes an Interpretive Center, which would provide cultural and historic information about the area, a conference and meeting space for indoor events, and Outfitters' Cabin, which would provide public access to the Inyo National Forest and the Sherwin Range.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
E.2.A Support a range of outdoor and indoor events, facilities, and services that enhance the community's resort economy.	**Consistent.** The Project proposes facilities and services for indoor events including conference and meeting space, and areas for outdoor events including an ice skating rink and other public spaces. See response to Policy E.1.D and E.1.L.
Diversify Economy	
E.3.B Support inclusion of cultural and educational institutions as components of mixed use developments.	**Consistent.** See response to Policy E.1.L. These amenities would provide visitors with information about the town and Project area and the various cultural and recreational amenities available.
E.3.C Support development of major public and private facilities that contribute to destination resort visitation in Mammoth Lakes.	**Consistent.** See response to Policy E.1.D and E.1.L. The Project proposes several major land use types including residential, commercial, retail, recreation, and hotel/resort uses, including a luxury Hotel, wellness center, spa, and conference facilities. The Project would integrate a mix of residential types within distinct neighborhood contexts. Additionally, the Project would include multiple options for recreational amenities, including a golf course, multi-use trails, Resident's Club, spa, ice skating pond, and access to hiking, biking, fishing, cross country skiing, and snow-shoeing activities in the Inyo National Forest and the Sherwin Range. These facilities would contribute to the Town's identity as a resort destination.
E.3.D Encourage adequate and appropriate commercial services for residents and visitors.	**Consistent.** See response to Policy E.1.D and E.3.C.
Business and Employment	
E.3.E Support establishment and expansion of industries complementary to the community, its environment and economy.	**Consistent.** See response to Policy E.1.D. The Project would expand an existing recreation node (Golf Course) in proximity to the proposed residential uses, with multiple options for recreational amenities including the expanded Snowcreek Golf Course, Resident's Club, and Outfitters' Cabin (providing outdoor equipment rental and trail head access/parking). The Project also proposes 75,000 square feet of non-residential space. These uses would complement and expand existing commercial and recreational activities in the town and would be developed in an environmentally friendly manner by being located near residential uses, incorporating energy efficient materials and practices, and would contribute to the economy of the Town and region.
E.3.J Continue to attract a diversified labor force through a mix of housing types and housing affordability.	**Consistent.** The Project proposes construction of a variety of recreation visitor and commercial recreation-employee housing. Proposed residential uses include low-, medium-, and high-density residential development (condominiums and townhomes), a Private Residence Club (PRC)/suite units, and Hotel accommodations. Of the residential development, 80 units would be allocated as on-site workforce housing.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
ARTS, CULTURE, AND HERITAGE	
Rich Community Culture	
A.1.A Encourage and support a wide variety of visual and performing arts, cultural amenities, events and festivals, and forums for local arts organizations.	**Consistent.** The Project includes a conference center and meeting facilities, which would provide a space for festivals and events. See response to Policy E.1.D and E.1.L.
Expressive of Community	
A.2.B Encourage development of arts, culture, and heritage facilities and venues.	**Consistent.** See response to Policy E.1.D and E.1.L.
A.2.C Support local history and heritage education in the community.	**Consistent.** See response to Policy E.1.L.
A.2.D Be stewards of the cultural, historical and archeological resources in and adjacent to town.	**Consistent.** The Project includes the Interpretive Center. The Interpretive Center would include an interactive educational facility, providing residents and visitors with information and exhibits regarding the history and resources of Mammoth Lakes and the Mammoth Creek Corridor.
COMMUNITY DESIGN	
Celebrate Public Spaces	
C.2.A Create well-designed and significant public spaces in resort/commercial developments to accommodate pedestrians and encourage social interaction and community activity.	**Consistent.** The Project would include a pedestrian and bicycle system with interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods. Public outdoor spaces would be designed to connect community members and allow for community activities including activities such as ice skating displays, art fairs, or farmer's markets.
C.2.B Maximize opportunities for public spaces that support community interaction, such as outdoor cafe and restaurant patios, performance and arts spaces, and child activity centers through public-private partnerships.	**Consistent.** The Project would provide multiple options for recreational amenities including the expanded Snowcreek Golf Course, Resident's Club, and Outfitters' Cabin (providing outdoor equipment rental and trail head access/parking) that support community interaction. The Project also proposes 75,000 square feet of non-residential space with restaurants, cafes, conference center and skating rink.
C.2.C Encourage development of distinct districts, each with an appropriate density and a strong center of retail, services or amenities.	**Consistent.** The Project is consistent with the underlying commercial design concepts expressed in this policy. The Project proposes a Master Plan providing for the completion of a master planned community including residential neighborhoods, commercial uses, hotel/resort uses, recreational amenities, and a trail/roadway system as proposed in the Master Plan for the Project site. The Project would integrate a mix of residential types within distinct neighborhood contexts. The Project would cluster medium and higher density residential units in the center of the development area, with lower density residential located adjacent to open space to preserve open space and provide for the transition of high- to low-density uses adjacent to open space areas. The Project

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
	would further integrate residential development with a natural environment by emphasizing an architectural style appropriate to the climate and natural setting of the Eastern Sierra. Traditional tools of California architecture would be encouraged, including rugged stone building bases, and expressive detailing at roof edges, balconies, window trims, and doorways. The goal would be a distinctive building architecture that is executed with materials, colors, and finishes, appropriate to the local environment. The Project would expand an existing recreation node (Golf Course) in proximity to the proposed residential uses, with multiple options for recreational amenities including the expanded Snowcreek Golf Course, Resident's Club, and Outfitters' Cabin (providing outdoor equipment rental and trail head access/parking). The Project proposes 75,000 square feet of non-residential space.
C.2.D Preserve and enhance special qualities of districts through focused attention on land use, community design and economic development.	**Consistent.** The Project would complement the design of the existing Snowcreek Master Plan area by being consistent with design for the area, proposing land uses in an efficient fashion, and contributing to the resort environment of the Town.
C.2.E Ensure that each district center is an attractive destination that is comfortable and inviting with sunny streets, plazas and sidewalks.	**Consistent.** See response to Policy C.2.C. The Project would include a pedestrian and bicycle system with interior trails and some sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods.
C.2.G Ensure that development in commercial areas provides for convenient pedestrian movement between adjoining and adjacent properties.	**Consistent.** See response to Policy C.2.E.
C.2.H Support transit ridership and pedestrian activity by emphasizing district parking, shared parking, mixed use and other strategies to achieve a more efficient use of land and facilities.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy by proposing several major land use types including residential, commercial, retail, recreation, and hotel/resort uses near transit stops. Additionally, the Project would provide pedestrian and bicycle connections to transit stops. The extent to which the Project proposes a balanced expansion of all major land use types, coordinated with commercial recreation development, would be contemplated by the Town during Project review and/or consideration. Short-term surface parking would be provided adjacent to check-in locations with long-term parking located under the major residential buildings to efficiently use land on the Project site. Some buildings may share check-in and parking access. Parking for the Golf Course would be provided through the Hotel parking.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
Celebrate the Spectacular Natural Surroundings	
C.2.I Achieve highest quality development that complements the natural surroundings by developing and enforcing design standards and guidelines.	**Consistent.** As noted in Section IV.B (Aesthetics), the Project would result in significant unavoidable impacts to scenic vistas. The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. As part of the approval process, the Town will review the location of the proposed structures and bulk/massing to determine if this impact can be reduced, and will review the use of building materials, colors, and landscaping to ensure consistency with the Town Development Code. Landscaping would incorporate some native trees and shrubs to revegetate disturbed areas, to buffer or frame views to allow summertime shading of outdoor places, to allow transition in scale and to soften building massing, and to introduce decoration and color into outdoor use areas. Planting on the Project site would use some native conifers, deciduous trees, and shrubs.
C.2.J Be stewards in preserving public views of surrounding mountains, ridgelines and knolls.	**Inconsistent.** Although the Hotel would not exceed 120 feet in height and would be located at a distance from Old Mammoth Road, the Project would result in significant unavoidable impacts to public views of the meadow and the surrounding mountains. Although residential buildings would be two- or three-stories in height and would not obscure views of the surrounding mountains, they would obscure some views of the meadows and foothills in the distant foreground. However, the location and massing of the proposed structures would be consistent with the Town's Design Guidelines and the General Plan policies under Neighborhood and District Character, Snowcreek. Additionally, the Project includes revisions to the Zoning Ordinance. If those revisions are approved, the height of the Hotel would be consistent with the height limitation in the Town's Zoning Code. In addition, in the 2007 General Plan, Neighborhood and District Character Snowcreek, 5.5.b, the Town notes that it desires "a variety of resort lodging supported by restaurants, resort services, neighborhood conveniences, commercial, retail, and outdoor ancillary recreation designed as a traditional small-scale village… b. Dispersed structures, light on the land, vertical emphasis and detailing (not heavy or strong horizontality)." The Project is designed to meet this desired characteristic and role.
C.2.L Create a visually interesting and aesthetically pleasing built environment by requiring all development to incorporate the highest quality of architecture and thoughtful site design and planning.	**Consistent.** See response to Policy C.2.I.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
C.2.M Enhance community character by ensuring that all development, regardless of scale or density, maximizes provision of all types of open space, particularly scenic open space.	**Consistent.** The Project would organize residential uses into a series of clustered neighborhoods (including low-, medium-, and high-density residential development) with open, landscaped areas interspersed among commercial and resort uses, and recreational amenities. The Project would provide for sensitive transitions between residential and other land uses through open space dedication including the golf course and design.
C.2.N Plan the siting and design of buildings to preserve the maximum amount of open space, trees and natural features to be consistent with themes and district character.	**Consistent.** The Project design would create a scale, form, and mass suited to the resort-alpine character of the site and the adjacent land uses. The Project would cluster development to preserve and maximize open, landscaped areas interspersed among commercial and resort uses, and recreational amenities. Few trees exist on the Project site. As part of the approval process, the Town will review the grading plans to assess the need for removal of any trees. Additionally the Town will review all landscaping plans to ensure that some native trees and shrubs are used to revegetate disturbed areas, to buffer or frame views to allow summertime shading of outdoor places, to allow transition in scale and to soften building massing, and to introduce decoration and color into outdoor use areas.
C.2.O Site development adjustments may be considered to preserve significant groups of trees or individual specimens. Replanting with native and compatible non-native trees to mitigate necessary tree removal is required.	**Consistent.** See response to Policy C.2.N.
C.2.Q Design development so that public spaces contribute to an overall sense of security and lack of vulnerability to crimes of opportunity.	**Consistent.** Design for the Project would be consistent with traditional approaches for the region, would address current needs, codes, regulations, and environmental considerations; would enhance the user experience, safety, and enjoyment; and would contribute to adequate buffering as needed.
C.2.R Plan parks for safety and compatibility with adjacent uses through thoughtful design including location of buildings, lighting, parking, emergency access, public transit and pedestrian/ bicycle access.	**Consistent.** See response to Policy C.2.Q.
C.2.S Ensure that pedestrian facilities have adequate non-glare lighting, visible signage and markings for pedestrian safety.	**Consistent**. The proposed Project would include an Outdoor Lighting Plan to ensure compliance with the Town's Lighting Ordinance (Chapter 17.34 of the Municipal Code). Excessive illumination would be avoided and lighting would be designed and placed to minimize glare and reflection. The Project is subject to design review by the Town Community Development Department, which would consider the adequacy of signage and markings for pedestrian safety.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
Distinctive Architecture	
C.2.T Use natural, high quality building materials to reflect Mammoth Lakes' character and mountain setting.	**Consistent.** See response to Policy C.2.C. and C.2.I.
C.2.U Require unique, authentic and diverse design that conveys innovation and creativity and discourages architectural monotony.	**Consistent.** See response to Policy C.2.C. and C.2.I.
Comfortable Building Height, Mass, and Scale	
C.2.V Building height, massing and scale shall complement neighboring land uses and preserve views to the surrounding mountains.	**Inconsistent.** See response to Policy C.2.J.
C.2.W Maintain scenic public views and view corridors as shown in Figures 1 and 2 that visually connect community to surroundings.	**Inconsistent.** See response to Policy C.2.J.
C.2.X Limit building height to the trees on development sites where material tree coverage exists and use top of forest canopy in general area as height limit if no trees on site.	**Consistent.** There are no trees on the portion of the site south of Old Mammoth Road. Therefore, development of any height on that portion of the site would not conflict with this policy. Development on the portion of the site north of Old Mammoth Road would not be in excess of forest canopy in the general area.
Community Design and Streetscape	
C.3.B Require distinctive design features at unique sites such as mountain portals, the terminus of a public view and other important public spaces and social gathering places.	**Consistent.** The Town will review the location of the proposed structures, bulk/massing, use of building materials, colors, and landscaping to ensure consistency with the Town Development Code which strives to protect major view corridors and major landscape characteristics.
C.3.C Maintain public rights-of-way for use by the public. Full or partial street closures by buildings, utilities, ramps or other facilities may be allowed for public plazas, parks or open space.	**Consistent.** Conceptual drawings show that no roads will be closed. Design-level details including all roadway, pedestrian, and bicycle facilities would be reviewed by the Town for functionality in a mountain climate.
C.3.D Development shall provide pedestrian-oriented facilities, outdoor seating, plazas, weather protection, transit waiting areas and other streetscape improvements.	**Consistent.** See response to Policy C.2.H., C.2.I. and C.2.C.
C.3.E Ensure that landscaping, signage, public art, street enhancements and building design result in a more hospitable and attractive pedestrian environment. Require an even higher level of design quality and detail in commercial mixed use areas.	**Consistent.** See response to Policy C.2.S. and C.2.N.
C.3.F Underground utilities within the community.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. All utilities would be located underground and would be reviewed by the Town for consistency with Design Guidelines.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
Natural Environment	
C.4.A Development shall be designed to provide stewardship for significant features and natural resources of the site.	**Consistent.** See response to Policy C.2.I and C.2.N.
C.4.B To retain the forested character of the town, require use of native and compatible plant species in public and private developments and aggressive replanting with native trees.	**Consistent**. See response to Policy C.2.N.
C.4.C Retain overall image of a community in a forest by ensuring that native trees are protected wherever possible and remain an important component of the community.	**Consistent**. See response to Policy C.2.N.
C.4.D Retain the forested character of the town by requiring development to pursue aggressive replanting with native trees and other compatible species.	**Consistent**. See response to Policy C.2.N.
Night Sky, Light Pollution, and Glare	
C.5.A Require outdoor light fixtures to be shielded and down-directed so as to minimize glare and light trespass.	**Consistent**. See response to Policy C.2.S.
C.5.C Improve pedestrian safety by eliminating glare for motorists through use of non-glare roadway lighting. A light fixture's source of illumination shall not be readily visible at a distance. Number of fixtures used shall be adequate to evenly illuminate for pedestrian safety.	**Consistent**. See response to Policy C.2.S.
Quiet Community	
C.6.A Minimize community exposure to noise by ensuring compatible land uses around noise sources.	**Consistent.** As noted in Section IV.I. (Noise), the proposed residential uses within the Project site would not be exposed to traffic noise levels exceeding 60dB L_{dn}.
C.6.B Allow development only if consistent with the Noise Element and the policies of this Element. Measure noise use for establishing compatibility in dBA CNEL and based on worstcase noise levels, either existing or future, with future noise levels to be predicted based on projected 2025 levels.	**Consistent.** The Project would be in compliance with the Town's noise ordinances.
C.6.C Development of noise-sensitive land uses shall not be permitted in areas where the noise level from existing stationary noise sources exceeds the noise level standards described in the Noise Element.	**Consistent.** Existing stationary sources do not exceed the noise level standards of Table VII (refer to Section IV.I. (Noise).
C.6.F Require mitigation of all significant noise impacts as a condition of project approval.	**Consistent**. See response to Policy C.6.B.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
C.6.G Require preparation of a noise analysis or acoustical study, which is to include recommendations for mitigation, for all proposed projects that may result in potentially significant noise impacts.	**Consistent.** A noise analysis was prepared for the Project to ensure compliance with the Town's noise ordinances.
NEIGHBORHOOD AND DISTRICT CHARACTER	
Snowcreek	
The Snowcreek District should not act as an exclusive development, but connect to the larger community and provide community access to Snowcreek and to surrounding public lands. Snowcreek should be designed to be a livable neighborhood, including workforce housing, convenience retail, public amenities, and active/passive recreation facilities. Snowcreek should contribute to the town's overall economy, tourism and mix of recreation amenities while preserving the area's unique features. Snowcreek characteristics: 1. Western range and meadow spacious setting, broad and wide open with backdrop of Sherwin Range 2. Anchor for and a greater connection to Old Mammoth District 3. Stress stewardship of land and resources 4. Provide access and staging areas to Sherwin Range and "community" uses accessible from Old Mammoth Road 5. A variety of resort lodging supported by restaurants, resort services, neighborhood conveniences, commercial, retail, and outdoor ancillary recreation designed as a traditional small-scale village: a) Active day and evening and through all four seasons b) Dispersed structures, light on the land, vertical emphasis and detailing (not heavy or strong horizontality) c) Landscape that reinforces sage, manzanita and wet meadow 6. Full service four-season resort with visitor/ recreation amenities such as: a) Horseback, sleigh and hay wagon rides, golf and tennis b) Clubhouse with food and beverage service c) Special events "town commons" d) Center for arts and culture 7. Integrated with Mammoth Creek Park and Mammoth Creek Corridor, the historical museum site, equestrian center, parking, trails,	**Consistent.** Development on the Project site would be clustered to provide areas of range and meadow and to allow views of the Sherwin Range. Snowcreek would provide an anchor for and a greater connection to Old Mammoth District by providing commercial and residential land uses that attract people and by providing vehicle and trail connections from Snowcreek to the Town's greater roadway and trail system. The Project would protect resources on the site including biological resources, cultural resources, and water quality through the inclusion of mitigation measures, thereby stressing stewardship of land and resources. The Outfitters' Cabin would provide access and staging areas to Sherwin Range and "community" uses accessible from Old Mammoth Road. The Project would develop a variety of resort lodging, including restaurants, resort services, neighborhood conveniences, activities, and outdoor recreation that would attract visitors during the day and evening and through all four seasons. Landscaping would incorporate native trees and shrubs to revegetate disturbed areas, to buffer or frame views to allow summertime shading of outdoor places, to allow transition in scale and to soften building massing, and to introduce decoration and color into outdoor use areas. Planting on the Project site would use native conifers, deciduous trees, and shrubs. Lastly, the Project would be integrated with Mammoth Creek Park, Mammoth Creek Corridor and the Sherwin Meadow Equestrian Center, and would include a historical interpretive center, and would provide parking, trails, and snow play areas adjacent to the Sherwin Range and Inyo National Forest lands. The Project has dispersed structures and a strong vertical emphasis with a 120-foot Hotel.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
and snow play, and future possibilities such as a recreation center or amphitheater.	
LAND USE	
Livability	
L.1.A Limit total peak population of residents, visitors, and employees to 52,000 people.	**Consistent.** The Project would result in the construction of 1,050 dwelling units. This number is less than originally proposed for the Snowcreek area. The Project is consistent with Draft 2007 General Plan population projections and would contribute approximately ten percent to future build-out development. It is not expected that the nature of the jobs created by the Project would result in an influx of employees from other areas. Therefore, the increase in population and jobs would be less than, but still consistent with the projections of the General Plan.
L.1.B Require all development to meet community goals for highest quality of design, energy efficiency, open space preservation, and promotion of a livable, sustainable community. Development that does not fulfill these goals shall not be allowed.	**Consistent.** See response to Policy C.2.I., C.2.C., Neighborhood and District Character Snowcreek, R.6.A, and R.10.A. In the 2007 General Plan, Neighborhood and District Character Snowcreek, 5.5.b, the Town notes that it desires "a variety of resort lodging supported by restaurants, resort services, neighborhood conveniences, commercial, retail, and outdoor ancillary recreation designed as a traditional small-scale village… b. Dispersed structures, light on the land, vertical emphasis and detailing (not heavy or strong horizontality)." The proposed height of the Hotel is designed to address this desired characteristic and role.
L.1.C Give preference to infill development.	**Consistent.** The Project is located towards the edge of Town, bordered by undeveloped lands to the east, and can not truly be considered as infill development. However, the Project would complete the Snowcreek Master Plan and would fulfill development plans for the area that have been contemplated since 1974.
L.1.D Conduct district planning and focused studies for special areas and sites within the community to aid in future planning.	**Consistent.** The Project areas has been studied and is included as an area to be master planned and developed with resort uses consistent with Neighborhood and District Character, Snowcreek. If a district plan is required, it will be prepared in accordance with Town's procedure for district planning.
L.2.A Emphasize workforce housing for essential public service employees, such as firefighters, police, snow removal operators, and teachers.	**Consistent.** The Project would integrate 80 units of workforce housing into the mix of housing types and contribute payment of in-lieu fees to assist in the development of the balance of required affordable units to be located off-site in an undetermined location.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
L.2.B Encourage a mix of housing types and forms consistent with design and land use policies.	**Consistent.** The Project would integrate a mix of residential types within distinct neighborhood contexts consistent with Town design and land use policies. Proposed residential uses include low-, medium-, and high-density residential development (condominiums and townhomes), a Private Residence Club (PRC)/suite units and hotel accommodations. See response to Policy C.2.X. and C.2.I.
Small Town Character	
L.3.A Achieve a diversity of uses and activities and efficient use of land by maintaining a range of development types.	**Consistent.** The Project would develop a variety of resort lodging, including restaurants, resort services, neighborhood conveniences, activities, and outdoor recreation that would attract visitors during the day and evening and through all four seasons. See response to Policy C.2.C., C.2.I., and Neighborhood and District Character.
L.3.B Develop vital retail centers and streets.	**Consistent.** See response to Policy L.3.A.
L.3.C Encourage development of small neighborhood-serving retail and services dispersed through town.	**Consistent.** See response to Policy C.2.C., C.2.I., and Neighborhood and District Character.
L.3.D Encourage outdoor dining in resort and commercial districts to increase street level animation.	**Consistent.** See response to Policy C.2.B., and Neighborhood and District Character discussion.
L.3.F Ensure appropriate community benefits are provided through district planning and development projects.	**Consistent.** See response to Policy L.1.D. The Project would provide community benefits such as additional facilities including an ice skating pond, wellness center/spa, expanded golf course, and access to trails in the Sherwin Range and Inyo National Forest lands that would provide hiking, mountain biking, cross-country skiing, and snowshoeing opportunities.
L.3.G Do not allow the transfer of unused density from built parcels.	**Consistent.** Although the Project includes the transfer of density from previously constructed portions of the Snowcreek Master Plan area, clustering of density and density transfers are allowed within master plan areas. The Project would be reduced by 137 units under the allowable density even without the density transfer.
L.3.H Density may be clustered or transferred through clearly articulated district plans to enhance General Plan goals and policies.	**Consistent.** The Project area is included in the Snowcreek Master Plan and proposes the transfer of unused density from previously constructed portions of the site to allow for clustering of residential units in order to maximize open space areas on the site.
Accommodations and Community Amenities	
L.5.A Encourage and support a range of visitor accommodations that include a variety of services and amenities.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy of providing visitor housing and recreation amenities. The Snowcreek Master Plan proposes areas of commercial development including 75,000 square feet of non-residential space including a Store, Interpretive Center, Hotel,

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
	Spa/Wellness Center, retail uses, restaurant, conference and meeting space, golf pro shop, and Outfitters' Cabin.
L.5.B Locate visitor lodging in appropriate areas.	**Consistent.** The Project would cluster medium and higher density residential units in the center of the development area, with lower density residential located adjacent to open space to preserve open space and provide for the transition of high- to low-density uses adjacent to open space areas.
L.5.C Ensure there are an adequate number of units available for nightly rental.	**Consistent.** The Project would include the construction of a 400-room/suite Hotel (including 250 hotel room/suite units and 150 Private Residence Club [PRC]/suite units).
L.5.E Development shall complement and diversify the range of resort community activities and amenities.	**Consistent.** See response to Policy L.5.A.
L.5.F Require all multi-family, resort, and specific plan development to include activities, amenities and services to support long-term visitation.	**Consistent.** See response to Policy L.5.A.
Urban Growth Boundary	
L.6.A No residential, commercial, or industrial development is permitted outside the Urban Growth Boundary (UGB) identified in Figure 4.	**Consistent.** All commercial and residential development would be located inside the UGB. The Golf Course would be located outside the UGB.
L.6.B Recreation facilities, other public facilities, and public utility installations may be permitted outside of the UGB when determined to be in the public interest and compatible with Town goals.)	**Consistent.** See response to Policy L.6.A.
L.6.C. Policy: The Town shall work collaboratively with Mono County, Inyo National Forest, and the Bureau of Land Management to ensure that land uses occurring adjacent to the Urban Growth Boundary shall be compatible with Town goals.	**Consistent.** The Town will review the location of the proposed structures, bulk/massing, use of building materials, colors, and landscaping to ensure consistency with the Town Development Code which strives to protect major view corridors and major landscape characteristics.
MOBILITY	
Regional Transportation	
M.2.A Maintain and expand access to recreation areas via coordinated system of shuttle and bus services, scenic routes, trails and highways.	**Consistent.** Bus stops and shelters would be located throughout the Project site. The Outfitters' Cabin and trailhead would provide access to public cross-country and snow shoeing trails of the Sherwin Range and Inyo National Forest.
In-Town Transportation	
M.3.A Maintain a Level of Service D or better on the Peak Design Day at intersections along arterial and collector roads.	**Consistent.** Implementation of the mitigation measure proposed in Section IV.M (Traffic and Circulation) would be required in order to improve the LOS to an acceptable LOS D and to reduce Project impacts on the study area street system to a less than significant level.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
M.3.B Reduce automobile trips by promoting and facilitating: • Walking • Bicycling • Local and regional transit • Innovative parking management • Gondolas and trams • Employer-based trip reduction programs • Alternate work schedules • Telecommuting • Ride-share programs • Cross-country Skiing and Snowshoeing	**Consistent**. The Project is consistent with this policy by including a bicycle and pedestrian system that would connect to existing on-site bikeways and to other Town bikeways to create safe continuous routes. The Project site is currently served for transit by Mammoth Lakes Transit Red Line. Bus stops and shelters would be located throughout the Project site. The Outfitters' Cabin and trailhead would provide access to cross-country and snow shoeing trails of the Sherwin Range and Inyo National Forest. The Project would include some retail uses that would help to reduce automobile trips by allowing residents to purchase necessities on-site.
M.3.C Reduce automobile trips by promoting land use and transportation strategies such as: implementation of compact, pedestrian-oriented development; clustered and infill development; mixed uses and neighborhood-serving commercial mixed use centers.	**Consistent.** The Project would encourage reduction in automobile trips by clustering development, providing some neighborhood-serving commercial uses near the Hotel, and providing pedestrian and bicycle facilities to encourage alternative transportation modes to other commercial uses such as the Market and located in other areas of Town.
M.3.D Encourage visitors to leave vehicles at their lodging by developing pedestrian, bicycle, transit and parking management strategies.	**Consistent.** See response to Policy M.3.B and M.3.C.
M.3.E Require development to implement Transportation Demand Management (TDM) measures.	**Consistent.** The Project would include TDM measures such as pedestrian and bicycle facilities and transit service and facilities.
M.3.F Encourage the school district, ski resort and other major public and private traffic generators to develop and implement measures to change travel behavior.	**Consistent.** See response to Policy M.3.B, M.3.C., and M.3.E.
M.3.G Construction activities shall be planned, scheduled and conducted to minimize the severity and duration of traffic impediments.	**Consistent.** As a condition of approval, Project construction activities shall be planned and scheduled and will be limited to set hours.
M.3.H Commercial developments shall not allow delivery vehicles and unloading activity to impede traffic flow through adequate delivery facilities and/or delivery management plans.	**Consistent.** Service vehicles would be routed and managed to minimize conflicts with the Project's visitor activities and local traffic. All buildings would be serviced from internal roadways with the exception of the Store, which would have a service driveway off of Old Mammoth Road, and the Outfitters' Cabin, which would be accessed from Sherwin Creek Road. The Hotel would have designated central facilities for service delivery and waste management. Service areas would be designed to accommodate required service vehicle sizes.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
Walking and Bicycling	
M.4.A Improve safety of sidewalks, trails and streets.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. The proposed roadway and pedestrian facility system would be reviewed by the Town to ensure that a safe movement of people is maintained.
M.4.B Provide a high-quality pedestrian system linked throughout the community with year round access.	**Consistent**. The Project would include a bicycle and pedestrian system that would connect to existing on-site bikeways and to other Town bikeways to create safe continuous routes.
M.4.C Design streets, sidewalks and trails to ensure public safety such as: • adequate dimensions and separation • glare-free lighting at intersections • directional and informational signage • trash receptacles • benches • shuttle shelters • protected roadway crossings • landscaping • groomed community trails • remove snow from sidewalks	**Consistent.** See response to Policy M.3.B. and M.3.C.
M.4.D Provide safe travel for pedestrians to schools and parks.	**Consistent.** The Project is consistent with this policy by including a multi-use pedestrian/bicycle trail system that would connect to existing multi-use trails to create safe continuous routes.
M.4.E Development shall improve existing conditions to meet Town standards.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. The proposed roadway system would be reviewed by the Town to ensure consistency with its design standards.
Transit System	
M.5.A Expand and increase reliability of transit service to meet the needs of the community and visitors.	**Consistent.** The Project would be required to pay an annual Transit and Transportation Fee to the Town as part of the Conditions of Approval.
M.5.B Encourage transit use by requiring development and facility improvements to incorporate such features as shelters, safe routes to transit stops, year-round access, etc.	**Consistent.** Bus stops and shelters would be located throughout the Project site. Design, location and implementation will be reviewed and approved by the Town.
M.5.C Increase availability of transit services by working collaboratively with other agencies and organizations.	**Consistent.** The applicant is working collaboratively with the Red Line to provide transit service to the Project site. Bus stops and shelters are will be located throughout the Project site.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
Parking	
M.6.A Develop efficient and flexible parking strategies to reduce the amount of land devoted to parking.	**Consistent.** The Project proposes both surface and understructure parking and provides for bus stops, as well as pedestrian trails and sidewalks.
M.6.B Support development of strategically located public parking facilities.	**Consistent.** The Mammoth Mountain Ski Area (MMSA) has agreed to alter the MMSA operated bus route that serves the Old Mammoth/Snowcreek area such that it enters the Project to provide service to the Hotel guests and residents (see Appendix J).
Streets	
M.7.A Install traffic control and safety operational improvements at intersections on arterial roads as required to meet the above levels of service.	**Consistent.** Implementation of the mitigation measure proposed in Section IV.M (Traffic and Circulation) would be required in order to improve the LOS to an acceptable LOS D and to reduce Project impacts on the study area street system to a less than significant level.
M.7.B Design and develop a functional hierarchy of arterial, collector, and local streets and rights-of-way including mid-block connectors.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. The proposed roadway system would be reviewed by the Town to ensure that a functional hierarchy of arterial, collector, and local streets and rights-of- way is maintained.
M.7.C Improve substandard roadways to Town standards.	**Consistent.** See response to Policy M.7.A.
M.7.D Monitor impact of development on local and regional traffic conditions and roadway network to plan for future improvements in network.	**Consistent.** A traffic impact analysis was prepared for the Project to assess potential impacts to roadways. The Project would incorporate future improvements to accommodate future traffic.
M.7.E Require all development to construct improvements and/or pay traffic impact fees to adequately mitigate identified impacts. Mitigation of significant project-related impacts may require improvements beyond those addressed by the current Capital Improvement Program and Town of Mammoth Lakes Air Quality Management Plan and Particulate Emissions Regulations.	**Consistent.** The Project proposes the installation of a traffic roundabout (Section IV.M, Traffic and Circulation) in order to improve the LOS to an acceptable LOS D and provide for the efficient movement of traffic. See response to Policy M.7.A.
M.7.F Plan new and/or reroute existing streets and circulation facilities where required by new development or to achieve circulation objectives.	**Consistent.** The Project internal access roads will be privately owned and maintained consistent with the Town Development Code, in consideration of the climatic extremes of the region.
M.7.G Identify and protect future public rights-of-way and facilities in development.	**Consistent.** The Project site plans will be reviewed by the Town to ensure that future public rights-of-ways are protected.
M.7.H Development shall dedicate, design and construct internal and adjacent streets, sidewalks and trails to Town standards.	**Consistent.** See response to Policy M.7.F.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
Traffic Calming	
M.8.A Encourage traffic-calming techniques that protect residential neighborhoods and streets, enhance public safety, maintain small-town character, and enhance resort design objectives.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. The proposed roadway and pedestrian facility system would be reviewed by the Town to ensure that residential neighborhoods and streets are protected, public safety is enhanced, and to enhance and maintain small-town character.
M.8.B Facilitate implementation of traffic-calming techniques by encouraging development of public private partnerships and pilot projects.	**Consistent.** The Project proposes the installation of a traffic roundabout (Section IV.M, Traffic and Circulation) for traffic calming and to improve LOS at the intersection. The Project would also include pedestrian facilities and lighting to provide for safe and efficient movement of traffic and pedestrians.
Snow Management	
M.9.A Require snow management methods that minimize environmental damage while optimizing road and pedestrian safety.	**Consistent.** The Project would incorporate snow management devices and roof drainage systems in the roof and building design, so that snow will not be permitted to shed freely into active pedestrian or vehicular areas.
M.9.B Increase year round pedestrian access to sidewalks and transit stops.	**Consistent.** See response to Policy M.9.A.
M.9.C Support development of geothermal and solar heating opportunities for snow removal.	**Consistent.** The Project applicant is exploring the use of geothermal heating opportunities for both heating and snow removal.
PARKS, OPEN SPACE, AND RECREATION	
A Town Within a Park	
P.2.B Require usable public recreation open space in all master planned developments.	**Consistent.** The Project would include multi-use trails, golf course, skating rink, spa/wellness center, Outfitters' Cabin, and access to public trails in the Inyo National Forest and Sherwin Range.
P.2.C Maximize parks and open space through flexible form-based zoning, development clustering and transfers of development rights (TDRs).	**Consistent.** The Project would cluster development on the Project site to maximize open space areas on the site north of Old Mammoth Road. The open space on the Project site south of Old Mammoth Road is protected from residential and commercial development by the land use covenant established in 2005.
P.2.D Increase understanding and appreciation of the cultural, natural and historical resources of the region and Town through development of programs, facilities and interpretive signage.	**Consistent.** The Project includes the Store and Interpretive Center. The Interpretive Center would include an interactive educational facility, providing residents and visitors with information and exhibits regarding the history and resources of Mammoth Lakes and the Mammoth Creek Corridor. The Store would draw inspiration from the historic Lutz Market during the early settlement days of Mammoth Camp. These facilities would increase understanding and appreciation of cultural, natural, and historic resources in the Town.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
P.3.A Ensure public routes for access to public lands are provided in all developments adjacent to National Forest lands.	**Consistent.** The Project proposes the Outfitters' Cabin, which would provide public access to the Inyo National Forest and Sherwin Mountains.
P.3.C Identify and acquire points of public access to public lands (from within the Urban Growth Boundary [UGB] to surrounding public lands) through cooperative arrangements including easements, purchase, or other means of title acquisition.	**Inconsistent.** The Project applicant has proposed to provide a location for public access to the Sherwin Range and Inyo National Forest along the eastern edge of the Project site which is outside the UGB. That access, while not as convenient as the current access points and routes, will be permitted and lawful and will be enhanced with a the Outfitters' Cabin that will provide opportunities for persons entering those public lands to rent ski equipment and other sports equipment.
Recreational Opportunities	
P.4.A Expand recreational opportunities by proactively developing partnerships with public agencies and private entities.	**Consistent.** The Project would include multi-use trails that link to existing Town trails, golf course, ice skating rink, spa/wellness center, Outfitters' Cabin, and access to public trails in the Inyo National Forest and Sherwin Mountains.
P.4.B Provide an affordable and wide range of year-round recreational opportunities to foster a healthy community for residents and visitors. Activities include: • downhill skiing & snowboarding • day & backcountry hiking • cross-country skiing • walking • back-country skiing & snowboarding • interpretive trails & signage • snowshoeing • climbing • sledding • touring • dog sledding • street & mountain biking • ice skating • camping • snowmobiling • fishing • sleigh rides • fall-color viewing • tennis • birding • swimming • health & fitness • soccer • off-highway vehicles • racquetball	**Consistent.** The Project would include multi-use trails (bicycle, walking/running), golf course and golf club, skating rink, spa/wellness center, and Outfitters' Cabin. The Outfitters' Cabin would provide public parking and would serve as the hub of summer and winter activities including cross-country, mountain biking, hiking, and snowshoeing trails and fishing, hay rides and sleigh rides in the Inyo National Forest and Sherwin Mountains.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
• equestrian activities • snow play • BMX • Skateboarding	
P.4.C Ensure balance of use, enjoyment and separation where appropriate between motorized and non-motorized modes of recreation.	**Consistent.** The Project would include non-motorized recreation, including multi-use trails (bicycle, walking/running), and provide access to fishing, and cross-country, mountain biking, hiking, and snowshoeing in the Sherwin Range and Inyo National Forest lands. The Project would contribute to non-motorized modes of recreation in the Town.
Connected Throughout	
P.5.A Create open space corridors by combining open space on neighboring properties.	**Consistent.** The area north of the Store and Interpretive Center is not proposed for development and will remain as open space, and may be preserved in the form of a conservation easement. In addition, the Project proposes golf course uses that would connect with an adjacent golf course and would create an open space corridor.
P.5.B Design and construct trails as components of a regional and local network for recreation and commuting.	**Consistent**. The Project would include a bicycle and pedestrian system that would connect to existing on-site bikeways and to other Town bikeways to create safe continuous routes.
P.5.C Require development to incorporate linked public trail corridors identified in the Mammoth Lakes Trail System Plan into overall project site plan.	**Consistent.** See response to Policy P.5.B.
P.5.D Design public and private streets not only as connections to different neighborhood districts, but also as an essential element of the open space system. Include parks and plazas, tree-lined open spaces and continuous recreational paths in design.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. The proposed roadway and pedestrian facility system would be reviewed by the Town to ensure that streets are an essential element of the open space system and include areas of tree-lined open spaces and a continuous recreational path.
P.5.E Design parks and open space to be accessible and usable except when set aside for preservation of natural resources, health and safety.	**Consistent.** The Project does not include any Town parks or dedicated open space areas. However, the Project is designed to enhance and complement recreational opportunities already available in the Town. Park-like and open space areas on the Project site would be accessible. The Project includes "stand alone" recreational amenities such as an golf course, a clubhouse and attendant facilities, an Outfitters' Cabin, a Resident's Club, a Hotel with ice skating, swimming, workout facilities, and a spa and wellness center.
P.5.F Ensure provision of parkland dedications or payment of in-lieu fees through project approvals or development impact fees.	**Consistent.** The Project's proposed recreational and public amenities, in conjunction with the Town's current facilities, and the collection of Developer Impact Fees would be adequate to accommodate the Project-created demand for recreational services.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
RESOURCE MANAGEMENT AND CONSERVATION	
Habitat Resources	
R.1.A Be stewards of important wildlife and biological habitats within the Town's municipal boundary.	**Consistent.** The Project would not impact rare, unique, or endangered species. The Project would be sited to cluster development and would not degrade habitat values. The Project would avoid Mammoth Creek and would not impact any riparian resources. As noted in Section IV.D. (Biology), the Project would not impact any deer migration corridors. Approximately 46 acres of potential foraging and resting habitat south of Old Mammoth Road and east of Fairway Drive that may be used by deer in the adjacent holding area would be lost. However, implementation of mitigation measures as described in Section IV.B would reduce this impact to less than significant.
R.1.B Development shall be stewards of Special Status plant and animal species and natural communities and habitats.	**Consistent.** See response to Policy R.1.A.
R.1.C Prior to development, projects shall identify and mitigate potential impacts to site-specific sensitive habitats, including special status plant, animal species, and mature trees.	**Consistent.** See response to Policy R.1.A.
R.1.D Be stewards of primary wildlife habitats through public and/or private management programs. For example, construction of active and passive recreation and development areas away from the habitat.	**Consistent.** See response to Policy R.1.A.
R.1.J Live safely with wildlife within our community.	**Consistent.** See response to Policy R.1.A.
R.2.A Trash enclosures, receptacles and food storage areas shall be animal resistant.	**Consistent.** The Project would incorporate animal resistant trash enclosures, receptacles and food storage areas.
R.2.B Be stewards of forested areas, wetlands, streams, significant slopes and rock outcroppings. Allow stands of trees to continue to penetrate the community to retain mountain character of Mammoth Lakes. Minimize tree removal for development to the greatest extent possible.	**Consistent.** Landscaping would incorporate some native trees and shrubs to revegetate disturbed areas, to preserve the resort-alpine character of the Town. Planting on the Project site would use native conifers, deciduous trees, and shrubs. Some Jeffrey pine and lodgepole pine are scattered throughout the basin sagebrush on the Project site. Some trees on the site may meet the minimum size (six inches in diameter) to require approval from the Town prior to removal. However, implementation of mitigation measures as described in Section IV.B would reduce this impact to less than significant.
R.2.C. Policy: Avoid wetland disturbance to greatest extent possible by requiring all feasible project modifications.	**Consistent.** See response to Policy R.1.A.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
R.3.A Prohibit development in the vicinity of Mammoth Creek that does not maintain minimum established setbacks and protect stream-bank vegetation.	**Consistent.** The Project would be sited and constructed to avoid Mammoth Creek and would not directly impact any wetland areas or riparian resources. The Store and Interpretive Center would be constructed on previously disturbed areas.
R.3.C Restore degraded areas within and adjacent to Mammoth Creek, in association with contiguous development projects or as off-site mitigation.	**Consistent.** The Project would be sited and constructed to avoid Mammoth Creek and would not directly impact any wetland areas or riparian resources. The Store and Interpretive Center would be constructed on previously disturbed areas. These areas would be restored and landscaped with native and compatible non-native species that are non-invasive.
R.3.D Improve public access to Mammoth Creek through discretionary project review and other available means.	**Consistent.** The Project does not include any public access to Mammoth Creek.; however, a conservation easement may be recorded which could allow future development of public access facilities.
Water Resources	
R.4.B Support and encourage water conservation and recycling practices within private and public developments.	**Consistent.** The Project may use recycled water for irrigation of the golf course if it becomes available.
R.4.C Require drought-tolerant landscaping and water-efficient irrigation practices for all development and Town-maintained landscaped areas, parks and park improvement projects. Development design, including parks, may include limited turf as appropriate to the intended use.	**Consistent.** Project landscaping will include drought resistant designs and planting and would conform to the Town's adopted water-efficient landscape regulations. Additionally Mammoth Community Water District policies regarding water conservation will be followed.
R.4.D Require development to use native and compatible non-native plants, especially drought-resistant species, to greatest extent possible when fulfilling landscaping requirements.	**Consistent.** See response to Policy R.4.C.
R.4.E Limit use of turf over root zones of native trees to avoid or minimize adverse impacts of excessive water to root zones of native trees.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. The Project landscaping would be drought resistant and would conform to the Town's adopted water-efficient landscape regulations. Additionally Mammoth Community Water District policies regarding water conservation will be followed.
R.5.A Wisely manage natural and historic drainage patterns.	**Consistent.** The Project would require grading on the site, which would modify natural and historic drainage patterns. However, the Project would incorporate measures as described by the Lahontan Regional Water Quality Control Board during and after construction to manage runoff from the Project site.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
R.5.B Require parking lot storm drainage systems to include facilities to separate oils and silt from storm water where practical and when warranted by the size of the project.	**Consistent**. The Project will follow the Lahontan Regional Water Quality Control Board guidelines for drainage and water retention facilities.
R.5.C Prevent erosion, siltation, and flooding by requiring use of Best Management Practices (BMPs) during and after construction.	**Consistent.** The proposed Project will follow the Lahontan Regional Water Quality Control Board BMPs and guidelines during and after construction.
Energy Resources	
R.6.A Reduce energy demand by promoting energy efficiency in all sectors of the community.	**Consistent.** The Project would incorporate energy conserving materials, systems, and appliances including using recycled water for irrigation of the Golf Course, planting native, drought tolerate landscaping, incorporating energy efficient appliances in the buildings, and conforming to Town ordinances for recycling..
R.6.C Encourage energy efficiency in new building and retrofit construction, as well as resource conservation and use of recycled materials.	**Consistent.** See response to Policy R.6.A.
R.7.A Use green building practices to greatest extent possible in all construction projects.	**Consistent.** See response to Policy R.6.A.
R.7.B Encourage development of housing close to work, commercial services, recreation areas and transit routes to reduce fuel consumption.	**Consistent.** The Project would include mixed-uses including residential uses adjacent to commercial services and recreation areas. The Project would include provisions for transit and shuttle service.
R.9.A Support programs to recycle materials such as paper, cardboard, glass, metal, plastics, motor oil; and programs to compost or chip for mulch tree cuttings, brush, and other vegetation.	**Consistent**. As discussed in Section IV.N (Utilities), the Project will incorporate the Town's recycling program, thereby diverting solid waste from the landfill.
Air Quality	
R.10.A Support regional air quality improvement efforts.	**Consistent**. As discussed in Sections IV. C (Air Quality) and IV.M (Transportation), the proposed Project would include mixed uses, which would include some retail facilities near residential uses. The Project would be located near public transportation stops and would include a shuttle, as well as a trail system to encourage the use of alternative modes of transportation. All these measures would encourage shopping locally and using alternative modes of transportation to access commercial and retail needs, which would result in a reduction of vehicle trips that would support the implementation of regional air quality goals.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
R.10.B Promote land use patterns that reduce number and length of motor vehicle trips, including: • development of in-Town workforce housing • residential and mixed use development adjacent to commercial centers • mountain portals and transit corridors • provision of a mix of support services in employment areas	**Consistent.** See response to Policy R.10.A.
R.10.C Support strategies for development that reduce projected total vehicle miles traveled including, but are not limited to: • circulation system improvements • mass transit facilities • private shuttles • design and location of facilities to encourage pedestrian circulation	**Consistent.** See response to Policy R.10.A.
R.10.D Mitigate impacts on air quality resulting from development through design, participation in Town air pollution reduction programs, and/or other measures that assure compliance with adopted air quality standards.	**Consistent.** See response to Policy R.10.A.
R.10.E Reduce air pollutants during construction through implementation of Best Management Practices (BMPs).	**Consistent.** The Project would incorporate BMPs during construction to reduce air pollutant emissions.
R.10.F Develop an efficient transportation system to reduce CO2 emissions and air pollutants.	**Consistent.** See response to Policy R.10.A.
R.10.H No solid fuel burning appliances will be installed within any multi-unit development.	**Consistent.** The Project would not include any solid fuel-burning appliances in multi-unit development.
PUBLIC HEALTH AND SAFETY	
Public Safety	
S.2.A Maintain safe and efficient municipal operations and services.	**Consistent.** As discussed in Section IV.K (Public Services) of this Draft EIR, the Project would not significantly impact operations and services of the Town of Mammoth Lakes Police Department, Mammoth Lakes Fire Protection District, Mammoth Unified School District, parks and recreation areas, Town of Mammoth Lakes Public Works, and Mammoth Community Water District (wastewater treatment).
Police Enforcement	
S.2.B Ensure effective code enforcement and policing programs.	**Consistent.** As discussed in Section IV.K (Public Services) of this Draft EIR, the Town of Mammoth Lakes Police Department would have sufficient resources to adequately satisfy the Project's demand for police protection service in addition to the existing demand for such service in the community.
S.2.D Increase public access to police services.	**Consistent.** See response to Policy S.2.B.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
Snow Management	
S.3.A. Policy: Design all structures in Mammoth Lakes to withstand snow loads and to reduce any additional hazards created by snow accumulation.	**Consistent.** The Project would be designed to current Town Municipal Code to withstand snow loads. The Project would incorporate snow management devices and roof drainage systems in the roof and building design, so that snow will not be permitted to shed freely into active pedestrian or vehicular areas.
S.3.B Design buildings so that snow shed, ice shed and snowmelt are not a hazard to people and property.	**Consistent.** See response to Policy S.3.A.
S.3.C All developments shall provide and maintain adequate on-site snow storage or maintain a Town-approved snow-hauling program.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. All roadway designs would be reviewed by the Town for snow management including areas adjacent to driveways and parking areas, ground level snow storage, and landscape snow shed areas. Ground and roof level snow storage areas would be identified. Landscape snow shed areas would be designated and located adjacent to the base of buildings and would be sized to accommodate the anticipated volumes of snow. Roof forms would be designed in coordination with pedestrian areas at the base of buildings. Snow falling from roofs would be directed to landscaped areas at the base for the buildings or to lower level flat roofs. The management of snow at the Project site would be the sole responsibility of the Snowcreek property owners or their designated representative association.
S.3.D Maintain safe public access and circulation through comprehensive snow removal programs provided by the Town or by private entities.	**Consistent.** See response to Policy S.3.C.
Geologic and Seismic	
S.3.H Restrict development in areas with steep slopes.	**Consistent.** The Project would not be located on areas of steep slopes.
S.3.I Require geotechnical evaluations and implement mitigation measures prior to development in areas of potential geologic or seismic hazards.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. The Project would be designed in conformance with the recommendations contained in the Geotechnical Report and to current CBC requirements, which will reduce the potential for structures on the Project site to sustain damage during an earthquake event.
Flood	
S.3.K Restrict development in flood areas and near perimeter of natural water bodies.	**Consistent.** The Project would be setback from and would avoid Mammoth Creek. No other portions of the site are located within a flood zone.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
Fire	
S.3.L All construction shall comply with wildland fire-safe standards, including standards established for emergency access, signing and building numbering, private water supply reserves available for fire use, and vegetation modification.	**Consistent.** The Project is located adjacent to open space areas to the east and south that could be subject to wildfires. The Project design has been reviewed by the Mammoth Lakes Fire Protection District and would conform to design and fire suppression standards and requirements in the Mammoth Lakes Fire Protection District Plan.
S.3.M Involve local fire department in the development review process.	**Consistent.** See response to Policy S.3.L.
S.3.N Minimize the incidence of fires by supporting the Mammoth Lakes Fire Protection District's ("MLFPD") ability to respond to emergencies.	**Consistent.** As described in Section IV.K (Public Services) of the Draft EIR, the Project would not require the need for new staff or new or altered fire protection facilities.
S.3.O Support provision of adequate water flow throughout the town and provision of adequate water storage to meet peak fire demand during times of peak domestic demands.	**Consistent.** The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. The Town would review the Project for conformance with the design and fire suppression standards and requirements as provided in the Mammoth Lakes Fire Protection District Plan.
Hazardous Materials	
S.3.R Provide for safe use and disposal of hazardous materials.	**Consistent.** Project uses include residential and resort uses. A small amount of everyday chemicals would be used including solvents and cleaners. These materials would be disposed of in compliance with all hazardous waste regulations.
S.3.S Require a Hazardous Materials Disclosure form from all development.	**Consistent.** The Project developer would be required to submit a Hazards Materials disclosure form during both construction and operation of the Project.
Emergency Preparedness	
S.4.A Aid emergency vehicle access and emergency evacuation of residents and visitors by providing and maintaining secondary access routes to all portions of the community, consistent with the Mammoth Lakes Fire Protection District ("MLFPD") requirements.	**Consistent.** The Project would include a secondary access point at Old Mammoth Road across from Snowcreek VII. The Project is subject to design review by the Town Community Development Department, other departments and divisions, and outside agencies. All roadway designs would be reviewed by the Town for adequate roadway standards and emergency vehicle access. As discussed in Section IV.K (Public Services) of this Draft EIR, the Project would conform to design and fire suppression standards and requirements in the Mammoth Lakes Fire Protection District Plan.
S.4.B Maintain an Emergency Plan.	**Consistent.** The Project would include the preparation of emergency plans.

Table IV.H-3
Comparison of Project Characteristics to Applicable Policies in the 2007 General Plan

Policy	Consistency Discussion
S.4.C Cooperate with emergency response agencies to maintain preparedness to respond to all types of emergencies.	**Consistent.** The Project design has been reviewed by the Mammoth Lakes Fire Protection District and would conform with design and fire suppression standards and requirements in the Mammoth Lakes Fire Protection District Plan. Additionally, the Town of Mammoth Lakes Police Department has been contacted to verify that it would have sufficient resources to adequately satisfy the Project's demand for police protection service in addition to the existing demand for such service in the community.
Education	
S.5.A Encourage development and enhancement of school sites and other administrative, educational, and recreational facilities.	**Consistent.** As discussed in Section IV.K (Public Services) of this Draft EIR, the Project applicant is required to pay school developer fees levied by the Town pursuant to Section 17620 of the California Education Code.
S.5.B Support expansion of educational opportunities within the community.	**Consistent.** See Response to Policy A.2.D and P.2.D.

The Project includes a 1987 General Plan Amendment to remove the Sherwin Ski Bowl from the area and include the expansion of the Golf Course. The Project also includes revisions to the Zoning Ordinance to allow the height of the Hotel and transfer of unused density within the master plan area. If the 1987 General Plan Amendment and Zoning Ordinance revisions are approved, the Project would be generally consistent with the applicable policies in the 1987 General Plan, the 2007 General Plan, and Town Zoning Ordinance by including features that are consistent with the General Plan(s). Areas where the Project would not be consistent include impacts to public views, changes to the amount of light and glare coming from the Project site and the identification and acquisition of points of public access to public lands from within the Urban Growth Boundary. The Project would only be generally consistent with General Plan policies related to transit-oriented development, since it would not include sufficient amounts of retail uses within walking distance to the Project to discourage the use of vehicles. Due to consistency with virtually all of the 1987 and 2007 General Plan policies in the above tables, impacts of the Project would be ***less than significant*** and would not require mitigation.

CUMULATIVE IMPACTS

Impact LU-2

Cumulative land use impacts could occur if other related projects in the Town of Mammoth Lakes would result in land use impacts in conjunction with the Project. Of the 41 related projects, 34 are residential projects located within the Town. The Project, in conjunction with other projects, is located within an urbanized area and would not be great enough in size or extent to divide an established community. The

Project site and its vicinity are not located within an area covered by a Habitat Conservation Plan or Natural Community Conservation Plan and, therefore, would not contribute to any cumulative impacts to Habitat Conservation Plans.

The Project is consistent with lot coverage as defined by the General Plan. Additionally, once the Zoning Code revisions are approved, the height of the proposed Hotel component of the Project would be consistent with height limitations as allowed in the Zoning Code. Each of these related projects would be required to demonstrate consistency with the goals, policies, and objectives of the General Plan, and other applicable regional plans and to determine whether they would result in environmental impacts. Therefore, the Project would not contribute to any cumulative land use impacts and this impact would be ***less than significant***.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project's land use impacts would be ***less than significant***.

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IV. ENVIRONMENTAL IMPACT ANALYSIS
I. NOISE

INTRODUCTION

This section analyzes the potential for adverse impacts on Project area noise levels resulting from implementation of the Project. Information used in the following analysis is drawn from the Project description, the Traffic Impact Analysis prepared for the Project and the Town 1987 General Plan and 2007 General Plan.

ENVIRONMENTAL SETTING

Fundamentals of Sound and Environmental Noise

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound. A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway. Table IV.I-1, Representative Environmental Noise Levels, illustrates representative noise levels in the environment.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL are measures of community noise. Each is applicable to this analysis and defined as follows:

- L_{eq}, the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.

- L_{dn}, the Day-Night Average Level, is a 24-hour average L_{eq} with a 10 dBA "weighting" added to noise during the hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24 hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.

- CNEL, the Community Noise Equivalent Level, is a 24-hour average L_{eq} with a 5 dBA "weighting" during the hours of 7:00 P.M. to 10:00 P.M. and a 10 dBA "weighting" added to noise during the hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24 hour L_{eq} would result in a measurement of 66.7 dBA CNEL.

- L_{min}, the minimum instantaneous noise level experienced during a given period of time.

- L_{max}, the maximum instantaneous noise level experienced during a given period of time.

Table IV.I-1
Representative Environmental Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	—110—	Rock Band
Jet Fly-over at 100 feet		
	—100—	
Gas Lawnmower at 3 feet		
	—90—	
		Food Blender at 3 feet
Diesel Truck going 50 mph at 50 feet	—80—	Garbage Disposal at 3 feet
Noisy Urban Area during Daytime		
Gas Lawnmower at 100 feet	—70—	Vacuum Cleaner at 10 feet
Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	—60—	
		Large Business Office
Quiet Urban Area during Daytime	—50—	Dishwasher in Next Room
Quiet Urban Area during Nighttime	—40—	Theater, Large Conference Room (background)
Quiet Suburban Area during Nighttime		
	—30—	Library
Quiet Rural Area during Nighttime		Bedroom at Night, Concert Hall (background)
	—20—	
		Broadcast/Recording Studio
	—10—	
Lowest Threshold of Human Hearing	—0—	Lowest Threshold of Human Hearing

Source: California Department of Transportation, 1998.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60–70 dBA range, and high above 70

dBA. Noise levels greater than 85 dBA can cause temporary or permanent hearing loss. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet suburban residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate level noise environments are urban residential or semi-commercial areas (typically 55–60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas (60–75 dBA) or dense urban or industrial areas (65–80 dBA).

When evaluating changes in 24-hour community noise levels, a difference of 3 dBA is a barely perceptible increase to most people. A 5 dBA increase is readily noticeable, while a difference of 10 dBA would be perceived as a doubling of loudness.

Noise levels from a particular source decline as distance to the receptor increases. Other factors, such as the weather and reflecting or shielding, also help intensify or reduce the noise level at any given location. A commonly used rule of thumb for roadway noise is that for every doubling of distance from the source, the noise level is reduced by about 3 dBA at acoustically "hard" locations (i.e., the area between the noise source and the receptor is nearly complete asphalt, concrete, hard-packed soil, or other solid materials) and 4.5 dBA at acoustically "soft" locations (i.e., the area between the source and receptor is earth or has vegetation, including grass). Noise from stationary or point sources is reduced by about 6 to 7.5 dBA for every doubling of distance at acoustically hard and soft locations, respectively. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer homes is generally 30 dBA or more.

Fundamentals of Environmental Groundborne Vibration

Groundborne vibration is sound radiated through the ground, and is an oscillatory motion that can be described in terms of the displacement, velocity, or acceleration. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. Sources of groundborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides, etc.), or manmade causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous, such as factory machinery, traffic, trains, and most construction vibrations (with the exception of pile driving, blasting, and some other types of construction/demolition), or transient, such as explosions.[1]

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[1] *California Department of Transportation, Transportation Related Earthborne Vibrations, Technical Advisory Number TAV-02-01-R9601, February 20, 2002.*

The ground motion caused by vibration is measured as particle velocity in inches per second in the United States. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration signal. According to data published by the California Department of Transportation (Caltrans), the PPV threshold of perception for humans falls approximately in the 0.006-0.019 range. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible.

The general human reaction to various continuous vibration levels, as well as their potential damage to buildings, is described in Table IV.I-2, Reaction of People and Damage to Buildings at Various Continuous Vibration Levels.

As shown in Table IV.I-2, data published by Caltrans indicate that 0.08 inch/second PPV is the level at which continuous vibrations are readily perceptible by people, and 0.10 inch/second PPV is the level at which continuous vibrations begin to annoy people in buildings. It should be noted, however, that the annoyance levels in Table IV.I-2 need to be interpreted with care. Depending on the activity (or inactivity) a person is engaged in, vibrations may be annoying at much lower levels than those shown in Table IV.I-2. In particular, elderly, retired, or ill people staying mostly at home, people reading in a quiet environment, people involved in vibration sensitive hobbies or other activities are but a few examples of people that are potentially annoyed by much lower vibration levels.[2]

[2] *California Department of Transportation, Transportation Related Earthborne Vibrations, Technical Advisory Number TAV-02-01-R9601, February 20, 2002.*

Table IV.I-2
Reaction of People and Damage to Buildings at Various Continuous Vibration Levels

Vibration Level (Peak Particle Velocity – in/sec)[a]	Human Reaction	Effect on Buildings
0.006-0.019	Threshold of perception; possibility of intrusion.	Vibrations unlikely to cause damage of any type.
0.08	Vibrations readily perceptible.	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected. This criterion level may also be used for historical buildings, or buildings that are in poor condition.
0.10	Level at which continuous vibrations begin to annoy people.	Virtually no risk of "architectural" damage to normal buildings.
0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations).	Threshold at which there is a risk of "architectural" damage to normal dwelling-houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage.
0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

[a] *The vibration levels are based on peak particle velocity in the vertical direction. Where human reactions are concerned, the value is at the point at which the person is situated. For buildings, the value refers to the ground motion. No allowance is included for the amplifying effect, if any, of standard components.*

Source: California Department of Transportation, Transportation Related Earthborne Vibrations, Technical Advisory Number TAV-02-01-R9601, February 20, 2002.

Regulatory Framework

Federal

Noise

There are no federal noise regulations applicable to the Project.

Groundborne Vibration

The *CEQA Guidelines* do not define the levels at which groundborne vibration is considered "excessive." This analysis uses the Federal Railway Administration's vibration impact thresholds for sensitive buildings, residences, and institutional land uses. These thresholds for residences and buildings where

people normally sleep (e.g., nearby residences) are 80 vibration decibel (VdB) for infrequent activities (less than 70 per day) and 72 VdB for frequent events (more than 70 per day).

State

Noise

The California Department of Health Services (DHS), Office of Noise Control, has published the Guidelines for Noise and Land Use Compatibility, which recommend guidelines for local governments to use when setting standards for human exposure to noise and preparing noise elements for general plans. These guidelines are summarized in Table IV.I-3, Noise and Land Use Compatibility Criteria. It should be noted that application of these guidelines to development projects is not mandated by the DHS; however, each jurisdiction is required to consider the Noise and Land Use Compatibility Criteria when developing its general plan noise element and when determining acceptable noise levels within its community.

Table IV.I-3
Noise and Land Use Compatibility Criteria

Land Use	Community Noise Exposure (L_{dn} or CNEL, dB)			
	Normally Acceptable[a]	**Conditionally Acceptable[b]**	**Normally Unacceptable[c]**	**Clearly Unacceptable[d]**
Single-family, Duplex, Mobile Homes	50 - 60	55 - 70	70 - 75	above 70
Multi-Family Homes	50 - 65	60 - 70	70 - 75	above 70
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	above 80
Transient Lodging – Motels, Hotels	50 - 65	60 - 70	70 - 80	above 80
Auditoriums, Concert Halls, Amphitheaters	---	50 - 70	---	above 65
Sports Arena, Outdoor Spectator Sports	---	50 - 75	---	above 70
Playgrounds, Neighborhood Parks	50 - 70	---	67 - 75	above 72
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 75	---	70 - 80	above 80
Office Buildings, Business and Professional Commercial	50 - 70	67 - 77	above 75	---
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	above 75	---

[a] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
[b] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
[c] Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
[d] Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: Office of Noise Control, California Department of Health Services (DHS).

As shown in Table IV.I-3, residential land uses and other noise sensitive receptors generally should be located in areas where outdoor ambient noise levels do not exceed 65 to 70 dBA (L_{dn} or CNEL). For single-family, duplex, and mobile homes, an exterior noise level up to 60 dBA (L_{dn} or CNEL) is considered to be a "normally acceptable" noise level, which is based on the assumption that any buildings involved are of normal construction that would not require special noise insulation. For multi-family homes, motels, and hotels, an exterior noise level up to 65 dBA (L_{dn} or CNEL) is considered to be a "normally acceptable" noise level. Between these noise values and 70 dBA (L_{dn} or CNEL), exterior noise levels for these land uses would be considered to be "conditionally acceptable," where construction should only occur after a detailed analysis of the noise reduction requirements is made and needed noise attenuation features are included in the Project. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. For commercial uses, exterior noise levels up to 70 dBA (L_{dn} or CNEL) are considered to be a "normally acceptable" noise level, while exterior noise levels up to 77 dBA (L_{dn} or CNEL) are considered to be a "conditionally acceptable" noise level.

Title 24 of the California Code of Regulations codifies Sound Transmission Control requirements, which establishes uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings. Specifically, Title 24 states that interior noise levels attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room of new multi-family dwellings. Dwellings are to be designed so that interior noise levels will meet this standard for at least 10 years from the time of building permit application.

Local

Town of Mammoth Lakes Noise Regulation

The Town of Mammoth Lakes (Town) is the local agency responsible for adopting and implementing policies as they relate to noise levels and its affect on land uses within its jurisdiction. Both acceptable and unacceptable noise levels associated with construction activities and exterior noise levels at various land use zones have been defined and quantified. Chapter 8.16 of the Mammoth Lakes Municipal Code (Town Noise Ordinance) controls unnecessary, excessive, and annoying noise in the Town. The Town Noise Ordinance sets forth sound measurement and criteria, maximum ambient noise levels for different land use zoning classifications, sound emission levels for specific uses, hours of operation for certain uses, standards for determining when noise is deemed to be a disturbance to the peace, and legal remedies for violations.

Exterior Noise Limits

Section 8.16.070 of the Town Noise Ordinance establishes exterior noise limits for various land use categories. These exterior noise limits are shown in Table IV.I-4, Town of Mammoth Lakes Exterior

Noise Limits. According to Section 8.16.070 of the Town Noise Ordinance, noise levels are not allowed to exceed:

1) The noise standard for that land use identified in Table IV.I-4 for a cumulative period of more than thirty minutes in any hour; or

2) The noise standard plus five decibels for a cumulative period of more than fifteen minutes in any hour; or

3) The noise standard plus ten decibels for a cumulative period of more than five minutes in any hour; or

4) The noise standard plus fifteen decibels for a cumulative period of more than one minute in any hour; or

5) The noise standard plus twenty decibels or the maximum measured ambient level, for any period of time.

Table IV.I-4
Town of Mammoth Lakes Exterior Noise Limits

Receiving Land Use	Time Period	Noise Zone Classification[a] Maximum Noise Levels (dBA) (Levels Not to Be Exceeded More Than Thirty Minutes in Any Hour)		
		Rural/ Suburban	Suburban	Urban
One and Two Family Residential	10 P.M. to 7 A.M.	40	45	50
	7 A.M. to 10 P.M.	50	55	60
Multiple Dwelling Residential/Public Space	10 P.M. to 7 A.M.	45	50	55
	7 A.M. to 10 P.M.	50	55	60
Limited Commercial/Some Multiple Dwellings	10 P.M. to 7 A.M.	55	--	--
	7 A.M. to 10 P.M.	60	--	--
Commercial	10 P.M. to 7 A.M.	60	--	--
	7 A.M. to 10 P.M.	65	--	--
Light Industrial	Anytime	70	--	--
Heavy Industrial	Anytime	75	--	--

[a] *The classification of different areas of the community in terms of environmental noise zones shall be determined by the noise control officer, based upon assessment of community noise survey data. Additional area classification should be used as appropriate to reflect both lower and higher existing ambient levels than those shown. Industrial noise limits are intended primarily for use at the boundary of industrial zones rather than for noise reduction within the zone.*

Source: Town of Mammoth Lakes Noise Ordinance, Chapter 8.16.

In addition, if the existing exterior ambient noise level exceeds the permissible level within the noise limit categories, the allowable noise exposure standard is increased in five dBA increments in each category as appropriate to encompass or reflect the ambient noise level. Furthermore, in the event the ambient noise

level exceeds the fifth noise limit category, the maximum allowable noise level under this category would be increased to reflect the maximum ambient noise level (Section 8.16.070 and 8.16.080 of the Town Noise Ordinance).

Interior Noise Limits

Section 8.16.080 of the Town Noise Ordinance establishes interior noise limits for multifamily residential dwellings. According to Section 8.16.080 of the Town Noise Ordinance, interior noise levels resulting from outside sources within residential units shall not exceed 45 dBA for a cumulative period more than five minutes in any hour between 7 A.M. and 10 P.M., and 35 dBA for a cumulative period of more than five minutes in any hour between 10 P.M. and 7 A.M. In addition, interior noise levels may not exceed:

1) The noise standards plus five decibels for a cumulative period of more than one minute in any hour; or

2) The noise standard plus ten decibels or the maximum measured ambient, for any period of time.

Furthermore, if the existing interior ambient noise level exceeds the permissible level within the noise limit categories, the allowable noise exposure standard is increased in five dBA increments in each category as appropriate to encompass or reflect the ambient noise level.

Construction Noise Limits

According to Section 15.08.020 of the Town Municipal Code, construction activities are permitted between the hours of 7 A.M. and 8 P.M., Monday through Saturday. Work hours on Sundays and Town recognized holidays are limited to the hours between 9 A.M. and 5 P.M., and are permitted only with the approval of the building official or designee.

The Town has established noise standards for construction activity in Section 8.16.090 of the Town Noise Ordinance. The construction noise standards are shown in Table IV.I-5, Town of Mammoth Lakes Construction Noise Standards. As shown below in Table IV.I-5, the Town of Mammoth Lakes has established maximum exterior noise levels during permitted work hours from the operation of equipment used in construction, drilling, repair, alteration, or demolition work. All mobile and stationary internal-combustion powered equipment and machinery are also required to be equipped with suitable exhaust and air-intake silencers in proper working order.

Table IV.I-5
Town of Mammoth Lakes Construction Noise Standards

Construction Equipment[a]	Maximum Noise Levels			
	Type I Areas Single-Family Residential	**Type II Areas Multi-Family Residential**	**Type III Areas Semi-Residential Commercial**	**Business Properties**
Mobile Equipment[b]				
Daily, except Sundays and legal holidays; 7 A.M. to 8 P.M.	75 dBA	80 dBA	85 dBA	--
Daily, 8 P.M. to 7 A.M. and all day Sunday and legal holidays	60 dBA	65 dBA	70 dBA	--
Daily, including Sunday and legal holidays; All hours	--	--	--	85 dBA
Stationary Equipment[c]				
Daily, except Sundays and legal holidays; 7 A.M. to 8 P.M.	60 dBA	65 dBA	70 dBA	--
Daily, 8 P.M. to 7 A.M. and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA	--
Daily, including Sunday and legal holidays, All hours	--	--	--	75 dBA

[a] *All mobile or stationary internal combustion engine-powered equipment or machinery shall be equipped with suitable exhaust and air intake silencers in proper working order.*
[b] *Maximum noise levels for nonscheduled, intermittent, short-term operation (less than ten days) of mobile equipment.*
[c] *Maximum noise levels for repetitively scheduled and relatively long-term operation (periods of ten days or more) of stationary equipment.*

Source: Town of Mammoth Lakes Noise Ordinance, Chapter 8.16.

Town of Mammoth Lakes Groundborne Vibration Regulation

A vibration threshold has been established in Section 8.16.090 of the Town Noise Ordinance. As indicated in Section 8.16.090 of the Noise Ordinance, operating or permitting the operation of any device that creates a vibration that is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. According to Section 8.16.020 of the Town Noise Ordinance, the vibration perception threshold is generally defined as a motion velocity of 0.01 inch per second over the range of one to one hundred Hertz (Hz),[3] which is considered to be the minimum ground-borne or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such direct means as, but not limited to, sensation by touch or visual observation of moving objects.

[3] *Hertz is a unit of frequency equal to one cycle per second.*

Existing Conditions

Existing Noise Environment

The Project site and surrounding area are characterized predominantly by residential and recreational uses. The majority of the Project area has or is currently being developed. Developments include six residential areas, the Snowcreek Athletic Club, and the nine-hole golf course. There are also a few undeveloped parcels that remain within the Master Plan Area. The land surrounding the Project area located to the south and east is USFS land that is heavily used for both summer and winter recreation activities. West of the Project area is the Old Mammoth residential district, which generally consists of low-density residential uses.

According to the Town General Plan Noise Element, the most significant noise sources in the Town include:

- Traffic on State Route 203 and major Town roadways
- Aircraft operations at Mammoth/June Lakes Airport (Mammoth Yosemite Airport)
- Helicopter operations at Mammoth Hospital[4]
- Snowmaking operations
- Snow removal activities
- Avalanche control operations
- Industrial activities near State Route 203 and Meridian Boulevard

Additional noise sources in the Town also result from temporary or periodic construction activities as well as recreational activities, such as the use of snowmobiles and off-road motorcycles. Located within the Town, the Project site is also subject to these various noise sources.

Existing Roadway Noise Levels On-site

While the various noise sources identified above generate mostly short-term noise levels, vehicular traffic is the major long-term noise source in the Town. Existing (winter 2005) roadway noise levels were calculated for the roadway segments of Minaret Road, extending from the north into the Project site, and

[4] *The Mammoth Hospital is no longer being used for helicopter operations.*

Old Mammoth Road, bisecting the Project site, to identify on-site noise levels due to traffic.[5] This task was accomplished using the Federal Highway Administration Highway Noise Prediction Model (FHWA-RD-77-108) and traffic volumes from the Project traffic analysis (included as Appendix H). The noise model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) utilized in the FHWA Model have been modified to reflect average vehicle noise rates identified for the state of California by Caltrans. The Caltrans data show that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The calculated average daily 24-hour noise levels along these roadway segments are presented in Table IV.I-6, Existing (Winter 2005) Roadway Noise Levels Onsite.

Existing Roadway Noise Levels Off-site

Existing (Winter 2005) roadway noise levels were calculated for the roadway segments in the Project vicinity that have existing noise-sensitive uses facing the roadways. As with the on-site noise levels, this task was accomplished using the FHWA-RD-77-108 model and traffic volumes from the Project traffic analysis. The average daily noise levels along these roadway segments are presented in Table IV.I-7, Existing (Winter 2005) Roadway Noise Levels Off-site. These noise measurements shown represent the noise levels experienced at approximately 75 feet from the roadway centerline.

Table IV.I-6
Existing (Winter 2005) Roadway Noise Levels On-site

Roadway	Roadway Segment	Reference CNEL at 100 feet[a]	Distance to Noise Contour (feet)		
			70 L_{dn}	65 L_{dn}	60 L_{dn}
Minaret Road	Main Street to Meridian Boulevard	58.5	17	37	80
Old Mammoth Road	West of Minaret Road	56.6	13	27	59
	Minaret to Meridian	62.3	26	57	123

[d] *Distances are in feet from roadway centerline. The identified noise level at 100 feet from the roadway centerline is for reference purposes only as a point from which to calculate the noise contour distances. It does not reflect an actual building location or potential impact location.*

Source: Christopher A. Joseph and Associates, 2006. Calculation data and results are provided in Appendix H to this Draft EIR.

[5] *The roadway noise levels are calculated for the existing (2005) typical winter conditions, which were used to represent the baseline condition in the Traffic Impact Analysis for the Project.*

Table IV.I-7
Existing (Winter 2005) Roadway Noise Levels Off-site

Roadway	Roadway Segment	Off-Site Noise Sensitive Uses	dBA L_{dn} at 75 feet[a]
Minaret Road	Meridian to Main Street	Residential	63.2
Old Mammoth Road	North of Meridian	Residential	66

[a] *The dBA L_{dn} values represent the noise levels experienced at approximately 75 feet from the roadway centerline.*

Source: Christopher A Joseph and Associates, 2006. Calculation data and results are provided in Appendix H of this EIR.

Existing Groundborne Vibration

Existing sources of groundborne vibration in the Town, including the Project site and its vicinity, generally include, but are not limited to, construction activities, avalanche control activities (e.g., blasting), snow removal activities, and roadway truck traffic. Within the Project area, the existing residential uses are considered to be vibration-sensitive land uses.

ENVIRONMENTAL IMPACTS

Methodology

Implementation of the Project could result in the introduction of noise levels that may exceed permitted Town noise levels. The primary sources of noise associated with the Project would be construction activities at the Project site and Project-related traffic volumes associated with operation of the proposed residential and commercial developments. Secondary sources of noise would include new stationary sources (such as heating, ventilation, and air conditioning units) and increased human activity throughout the Project site. The net increase in Project site noise levels generated by these activities and other sources have been quantitatively estimated and compared to the applicable noise standards and thresholds of significance.

Aside from noise levels, groundborne vibration would also be generated during the construction phase of the Project by various construction-related activities and equipment. Thus, the groundborne vibration levels generated by these sources have also been estimated and compared to applicable thresholds of significance.

Construction Noise Levels

Construction noise levels were estimated by data published by the United States Environmental Protection Agency (U.S. EPA). Potential noise levels are identified for off-site locations that are sensitive to noise, including existing residences.

Roadway Noise Levels

Roadway noise levels have been calculated for various locations around the Project site vicinity. The noise levels were calculated using the FHWA-RD-77-108 model and traffic volumes from the Project traffic analysis. The average vehicle noise rates (energy rates) utilized in the FHWA Model have been modified to reflect average vehicle noise rates identified for California by Caltrans.

Groundborne Vibration Associated with Construction Equipment

Groundborne vibration levels resulting from construction activities occurring within the Project site were estimated by data published by Harris Miller Miller & Hanson Inc. for the Federal Transit Administration. Potential vibration levels resulting from construction of the Project are identified for off-site locations that are sensitive to vibration, including existing residences.

Thresholds of Significance

In accordance with Appendix G of the *CEQA Guidelines*, the Project could have a significant environmental impact if it would result in:

(a) Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies;

(b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;

(c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project;

(d) A substantial temporary or periodic increase in ambient noise levels in the Project above levels existing without the Project;

(e) Exposure of people residing or working in the Project area to excessive noise levels if the Project is located within an area covered by an airport land use plan, or where such plan has not been adopted, within two miles of a public airport or public use airport; or

(f) Exposure of people residing or working in the Project area to excessive noise levels if the Project is located in the vicinity of a private airstrip.

The State *CEQA Guidelines* do not define the levels at which groundborne vibration or groundborne noises are considered "excessive." This analysis uses the Town of Mammoth Lakes' vibration impact threshold identified in Section 8.16.090 of the Town Noise Ordinance. According to Section 8.16.090 of the Town Noise Ordinance, operating or permitting the operation of any device that creates a vibration that is above the vibration perception threshold of an individual at or beyond the property boundary of the

source if on private property or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The vibration perception threshold is generally defined in the Town Noise Ordinance as a motion velocity of 0.01 inch per second over the range of one to one hundred Hertz (Hz).

The *CEQA Guidelines* do not define the levels at which temporary and permanent increases in ambient noise are considered "substantial." As discussed previously in this section, a noise level increase of three dBA is barely perceptible to most people, a five dBA increase is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness. Based on this information, an increase in the L_{dn} noise level resulting from the Project at noise sensitive land uses of three dBA or greater would be considered a significant impact when projected noise levels would exceed those considered satisfactory for the affected land use (see Table IV.I-4, Town of Mammoth Lakes Exterior Noise Limits). If the noise environment at the sensitive land use is at or below normally-acceptable noise levels, an increase in noise levels of five dBA or greater would be considered significant.

Project Impacts and Mitigation Measures

Impact NOISE-1 Exposure of Persons to Excessive Noise Levels

Construction Noise

Construction of the Project would require the use of heavy equipment for site grading and excavation, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. During each stage of development, there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of the activity.

The U.S. EPA has compiled data regarding the noise generating characteristics of specific types of construction equipment and typical construction activities. These data are presented in Tables IV.I-8, Noise Ranges of Typical Construction Equipment, and IV.I-9, Typical Outdoor Construction Noise Levels. These noise levels would diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 84 dBA L_{eq} measured at 50 feet from the noise source to the receptor would reduce to 78 dBA L_{eq} at 100 feet from the source to the receptor, and reduce by another 6 dBA L_{eq} to 72 dBA L_{eq} at 200 feet from the source to the receptor.

During construction, two basic types of activities would be expected to occur and generate noise. The first activity would involve the preparation, excavation, and grading of the Project site to accommodate the building foundations for the new residential developments that are being proposed.[6] The second

[6] *Limited commercial development (up to a maximum of 29,000 square feet of retail space and up to a maximum of 50,000 square feet of conference center/commercial space) would also be allowed in specific sectors of the plan with discretionary approval by the Town.*

activity that would generate noise during construction would involve the physical construction and finishing of the new buildings. Overall, construction activities within the Project site are anticipated to occur over a six-year period, ending in 2017. No pile driving activities would be required for the Project.

Table IV.I-8
Noise Ranges of Typical Construction Equipment

Construction Equipment	Noise Levels in dBA L_{eq} at 50 feet[a]
Front Loader	73–86
Trucks	82–95
Cranes (moveable)	75–88
Cranes (derrick)	86–89
Vibrator	68–82
Saws	72–82
Pneumatic Impact Equipment	83–88
Jackhammers	81–98
Pumps	68–72
Generators	71–83
Compressors	75–87
Concrete Mixers	75–88
Concrete Pumps	81–85
Back Hoe	73–95
Pile Driving (peaks)	95–107
Tractor	77–98
Scraper/Grader	80–93
Paver	85–88

[a] *Machinery equipped with noise control devices or other noise-reducing design features does not generate the same level of noise emissions as that shown in this table.*

Source: U.S. EPA 1971

Table IV.I-9
Typical Outdoor Construction Noise Levels

Construction Phase	Noise Levels at 50 Feet with Mufflers (dBA L_{eq})	Noise Levels at 60 Feet with Mufflers (dBA L_{eq})	Noise Levels at 100 Feet with Mufflers (dBA L_{eq})	Noise Levels at 200 Feet with Mufflers (dBA L_{eq})
Ground Clearing	82	80	76	70
Excavation, Grading	86	84	80	74
Foundations	77	75	71	65
Structural	83	81	77	71
Finishing	86	84	80	74

Source: U.S. EPA, 1971.

As shown in Table IV.I-9, typical outdoor noise levels at noise-sensitive receptors 50 feet from the noise source could range from 77 dBA to 86 dBA L_{eq}, without implementation of noise reduction measures. The noisiest pieces of equipment that would be used during the Project's construction phase would

include jackhammers and pavers, which produce noise levels of approximately 75 and 80 dB(A) at 50 feet with implementation of the required feasible noise reduction control measures. Construction equipment would not include pile drivers.[7] As with all construction equipment, these noise levels would diminish rapidly with distance from the construction site at a rate of approximately six dB (A) per doubling of distance.

The nearest sensitive receptors are the multi-family residences located approximately 100 feet to the west –southwest of Lot 15. These multi-family residential units would experience noise levels of approximately 80 dBA during site grading and finishing. Additional multi-family residential units are located approximately 180 feet to the southwest of Lot 8, 400 feet to the north of Lot 15, and 400 feet to the west of Lot 12. These additional multi-family residential units may experience noise levels of approximately 74 dBA and 68 dBA, respectively, during site grading and finishing. Single-family residential units are located approximately 1,500 feet to the southwest of Lot 9 while a Catholic Church is located approximately 1,000 feet to the west of Lot 12. In addition, the Mammoth Creek Park and Sherwin Sierra Meadows Ranch are located approximately 1,200 feet and 1,400 feet from Lot 2, respectively, while the Snowcreek Athletic Club is located approximately 1,600 from Lot 12. Due to the distance of these receptors from the Project site, and the fact that noise attenuates at approximately six dB (A) per doubling of distance, it is not likely that construction noise would be audible at these locations.

In addition, as discussed previously, the Project would be constructed in four Phases, with Phases II, III and IV consisting of multi-family residential units. The units in these Phases would be occupied by residents prior to the construction of each subsequent Phase, resulting in "new" sensitive receptors being generated by the development of each Phase within the Project site. In other words, upon completion of Phase II, the nearest residential units may be located as close as approximately 50 feet from the development of Phase III. Therefore, these 'new" sensitive receptors may be exposed to maximum noise levels of approximately 86 dBA L_{eq} during site grading and finishing of Phase III. Similarly, the residents of Phase III may be exposed to noise generated during the construction of Phase IV resulting in these "new" sensitive receptors being exposed to noise levels of approximately 89 dBA L_{eq} during site grading and finishing of Phase III. Residents of Phase IV would not be exposed to major construction noise.

Currently, under Section 15.08.020 of the Town Municipal Code, construction activities are limited to between the hours of 7 A.M. and 8 P.M., Monday through Saturday. Work hours on Sundays and Town recognized holidays are limited to the hours between 9 A.M. and 5 P.M., and are permitted only with the approval of the building official or designee. In addition, the Town has established noise standards for construction activity in Section 8.16.090 of the Town Noise Ordinance (see Table IV.I-5, Town of Mammoth Lakes Construction Noise Standards). According to these established construction noise standards, the maximum exterior noise levels allowed in multi-family residential areas for mobile (e.g., excavator, backhoe, dozer, loader, etc.) and stationary equipment (e.g., generators, compressors, pumps,

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[7] *CAJA Correspondence with Tammy Bennett, Project Engineer, The Chadmar Group, January 4, 2007.*

etc.) during 7 A.M. to 8 P.M. Monday through Saturday are 80 dBA and 65 dBA, respectively. In addition, the maximum exterior noise levels allowed in multi-family residential areas for mobile and stationary equipment during 8 P.M. to 7 A.M. Monday through Saturday, and all day Sunday and legal holidays, are 64 dBA and 55 dBA, respectively. Furthermore, all mobile and stationary internal-combustion powered equipment and machinery are required to be equipped with suitable exhaust and air-intake silencers in proper working order under the Town Noise Ordinance.

Because the Project would be required to comply with the provisions of the Town Municipal Code and Noise Ordinance, construction activities associated with the Project would only occur within the hours permitted for construction within the Town (i.e., 7 A.M. to 8 P.M., Monday through Saturday, and 9 A.M. to 5 P.M. on Sundays and Town recognized holidays with approval of the building official or designee). However, construction noise levels experienced by off-site residential uses in the surrounding area could exceed the maximum exterior noise level standards allowed for mobile and stationary construction equipment under the Town Noise Ordinance. As such, a significant impact could result. To reduce the noise levels resulting from construction of the Project to the extent feasible, Mitigation Measures NOISE-1a and NOISE-1b shall be implemented, which requires the Project to comply with the construction hours of the Town Municipal Code and that construction best management practices (BMPs) to be implemented by contractors to reduce construction noise levels. While these noise attenuation measures would reduce the construction noise levels of the Project to the maximum extent feasible, they would not ensure that the noise levels would not exceed the Town's maximum exterior noise standard for construction activity at single-family residential, multi-family residential, commercial, and business properties (see Table IV.I-5, Town of Mammoth Lakes Construction Noise Standards). Depending on the distance of nearby off-site uses to the Project site, implementation of Mitigation Measures NOISE-1a through NOISE-1c would ensure that noise levels are below the Town's maximum exterior noise standards for construction activity, resulting in a ***less than significant*** impact.

Mitigation Measure NOISE-1a Exposure of Persons to Excessive Noise Levels

Construction activities shall be limited to between the hours of 7 A.M. and 8 P.M., Monday through Saturday. Work hours on Sundays and Town recognized holidays shall be limited to the hours between 9 A.M. and 5 P.M., and shall be permitted only with the approval of the building official or designee.

Mitigation Measure NOISE-1b Exposure of Persons to Excessive Noise Levels

Project developers shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels:

- Provide advance notification of construction to the immediate surrounding land uses around a development site
- Ensure that construction equipment is properly muffled according to industry standards

- Place noise-generating construction equipment and locate construction staging areas away from residences, where feasible

- Schedule high noise-producing activities between the hours of 8 A.M. and 5 P.M. to minimize disruption on sensitive uses

- Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, noise barriers or noise blankets

Mitigation Measure NOISE-1c Exposure of Persons to Excessive Noise Levels

Project developers shall require by contract specifications that construction staging areas within the Project site would be located as far away from vibration-sensitive sites as feasible.

Impact NOISE-2 Excessive Construction-Related Groundborne Vibration

Construction activities that would occur within the Project site would include grading and excavation which would have the potential to generate low levels of groundborne vibration. Table IV.H-10, Vibration Source Levels for Construction Equipment, identifies various vibration velocity levels for the types of construction equipment that would operate during the construction of the Project. Based on the information presented in Table IV.H-10, vibration levels could reach as high as approximately 87 VdB within 25 feet of the Project site from the operation of large bulldozers.

Table IV.H-10
Vibration Source Levels for Construction Equipment

Construction Equipment		Approximate VdB at 25 feet
Pile Driver (impact)	Upper Range	112
	Typical	104
Pile Drive (sonic)	Upper Range	105
	Typical	93
Large Bulldozer		87
Caisson Drilling		87
Loaded Trucks		86
Jackhammer		79
Small Bulldozer		58

Source: Harris Miller Miller Hanson, Transit Noise and Vibration Impact Assessment, May 2006.

Construction activities associated with the Project would have the potential to impact existing off-site sensitive receptors, which include the residential uses that are located adjacent to the Project site's boundaries to the west and south. Similar to noise levels, vibration levels attenuate at approximately 6 VdB per doubling of distance. Therefore, a vibration level of 100 VdB measured at 50 feet from the source would be reduced to approximately 94 VdB at 100 feet from the source.

The nearest sensitive receptors are the multi-family residences located approximately 100 feet to the west–southwest of Lot 15. These multi-family residential units may experience vibration levels of approximately 81 VdB during site grading and finishing. Additional multi-family residential units are located approximately 180 feet to the southwest of Lot 8, 400 feet to the north of Lot 15 and 400 feet to the west of Lot 12. These additional multi-family residential units may experience noise levels of approximately 75.9 VdB and 68.9 VdB, respectively, during site grading and finishing. Single-family residential units are located approximately 1,500 feet to the southwest of Lot 9 while a Catholic Church is located approximately 1,000 feet to the west of Lot 12. In addition, the Mammoth Creek Park and Sherwin Sierra Meadows Ranch are located approximately 1,200 feet and 1,400 feet from Lot 2, respectively, while the Snowcreek Athletic Club is located approximately 1,600 from Lot 12. Due to the distance of these receptors from the Project site, and the fact that vibration attenuates at approximately six VdB per doubling of distance, it is not likely that construction vibrations would be noticable at these locations.

In addition, as discussed previously, the Project would be constructed in four Phases, with Phases II, III and IV consisting of multi-family residential units. The units in these Phases would be occupied by residents prior to the construction of each subsequent Phase, resulting in "new" sensitive receptors being generated by the development of each Phase within the Project site. In other words, upon completion of Phase II, the nearest residential units may be located as close as approximately 50 feet from the development of Phase III. Therefore, these 'new" sensitive receptors may be exposed to maximum vibration levels of approximately 87 VdB during site grading and finishing of Phase III. Similarly, the residents of Phase III may be exposed to noise generated during the construction of Phase IV resulting in these "new" sensitive receptors being exposed to noise levels of approximately 87 VdB during site grading and finishing of Phase III. Residents of Phase IV would not be exposed to major construction noise.

As discussed under Regulatory Framework above, the Town has identified a vibration impact threshold in Section 8.16.090 of the Town Noise Ordinance. According to Section 8.16.090 of the Town Noise Ordinance, operating or permitting the operation of any device that creates a vibration that is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. However, the nearest existing residences would be approximately 100 feet from construction.

Construction of the Project would require the use of typical construction equipment that could generate some ground-borne vibration and ground-borne noise, but the Project would not involve the use of pile drivers, which have the potential to generate substantial vibration. In addition, per the Town's requirements, construction activities that would produce groundborne vibration would primarily occur between the hours of 7:00 AM and 8:00 PM Monday through Friday. Therefore, these activities would not occur during recognized sleep hours for residents. Based on this information, proposed construction activities associated with the Project would not expose sensitive receptors in the Project vicinity to excessive groundborne vibration levels. Therefore, Project impacts related to excessive construction-

related groundborne vibration would be considered ***less than significant*** and no mitigation measures would be required.

Impact NOISE-3 Temporary Increases in Noise (Construction Noise)

As discussed previously, the uses nearest the Project site that are sensitive to construction noise are the single-family and multi-family residential uses adjacent to the Project site's southern and western boundaries. The property line of the nearest off-site, multi-family residential uses is located approximately 100 feet from the edge of the areas of construction within the Project site. Based on this distance, construction activities occurring at the Project site could reach approximately 80 dBA L_{eq} during the daytime at the property line of these single-family residential uses. As discussed under the Thresholds of Significance heading of this section, this EIR assumes that an increase of five dBA or greater over ambient noise levels is substantial and significant. Therefore, demolition and construction activities associated with the Project, particularly the use of heavy machinery, could generate temporary intermittent noise in excess of the Town's noise standards. However, construction activities would only occur during the permitted hours designated in the Town's Municipal Code, and thus would not occur during recognized sleep hours for residences or on days that residents are most sensitive to exterior noise. In addition, construction activities would also be required to comply with the construction noise standards established in the Town Noise Ordinance. As such, although a physical increase in ambient noise levels would occur from the construction activities associated with the Project, this temporary increase would not create an adverse effect on nearby residents. Therefore, with compliance with the Town's Municipal Code and Noise Ordinance, the magnitude of this impact would be reduced to a ***less than significant*** level.

Impact NOISE-4 Permanent Increases in Noise (Operational Impacts)

Traffic Noise Levels On-site

Upon completion of the Project, noise levels within the Project site would be primarily generated by vehicular traffic on the surrounding roadways. As discussed previously, the Town has established exterior noise standards for different land uses. As indicated in the Town Noise Ordinance, noise levels at each land use may not exceed the exterior noise standard plus 20 dBA for any period of time (maximum noise level). As such, the maximum noise level that is allowed for any period of time for single-family residential uses would be 70-80 dBA L_{dn} during daytime hours and 60-70 dBA L_{dn} from 10P.M. until 7 a.m. (See Table IV.I-4, Town of Mammoth Lakes Exterior Noise Limits). The average daily noise levels along the roadway segments of Minaret Road and Old Mammoth Road were determined in order to identify on-site noise levels due to traffic on these roadways in the future when the Project is completed. Table IV.I-10, Cumulative Plus Project Roadway Noise Levels Onsite, shows the average daily 24-hour noise levels along these roadway segments in the future when development of the Project along with the other related projects is completed.

Table IV.I-11 shows the distances from the roadway centerlines to the 70 L_{dn} contour for each of the roadways that would either bisect or border the Project site in the future when buildout of the Project has been completed. Based on the conceptual site plan for the Project showing the locations of the proposed residential uses relative to the surrounding roadways, none of the residential uses proposed in the Project site would be located within the 70 L_{dn} contours of the roadways analyzed in Table IV.I-11. Thus, the proposed residential uses within the Project site would not be exposed to traffic noise levels exceeding 70 L_{dn}. Thus, impacts associated with traffic noise levels on-site would be considered ***less than significant***.

Table IV.I-11
Future Plus Project Roadway Noise Levels On-site

Roadway	Roadway Segment	Reference CNEL at 100 feet[a]	Distance to Noise Contour (feet)		
			70 L_{dn}	65 L_{dn}	60 L_{dn}
Minaret Road	Main Street to Meridian Boulevard	61	25	54	116
Old Mammoth Road	West of Minaret Road	59.1	19	40	87
	Minaret to Meridian	62.9	33	72	155

[b] *Distances are in feet from roadway centerline. The identified noise level at 100 feet from the roadway centerline is for reference purposes only as a point from which to calculate the noise contour distances. It does not reflect an actual building location or potential impact location.*

Source: Christopher A. Joseph and Associates, 2006. Calculation data and results are provided in Appendix H to this Draft EIR.

Off-Site Traffic Noise

The increase in traffic resulting from implementation of the Project would increase the ambient noise levels at sensitive off-site locations in the Project vicinity. Because traffic is considered to be a long-term noise source, a substantial permanent increase in ambient noise levels in the Project vicinity could potentially occur. Table IV.I-12, Predicted Future Roadway Noise Levels identifies the changes in future noise levels along the study-area roadway segments in the Project vicinity that have existing residential uses. As discussed previously, a difference of three dBA between 24-hour noise levels is a barely-perceptible increase to most people. A five dBA increase is readily noticeable, and a difference of ten dBA would be perceived as a doubling of loudness. Thus, as discussed under the Thresholds of Significance heading of this section, this EIR assumes that an increase of five dBA or greater over ambient noise levels is substantial and significant. Furthermore, this EIR also assumes that an increase in noise level of three dBA or greater over ambient noise levels is substantial and significant if the noise increase would meet or exceed the Town's noise level standard for the affected land use, while any increase in noise level below three dBA would be considered imperceptible and ***less than significant***.

Table IV.I-12
Future Off-Site Future Roadway Noise Levels

Roadway Segment	Existing Noise Sensitive Uses	Noise Levels in dBA L_{dn} at 75 feet[a]			
		Existing Noise Levels	Cumulative (Existing Plus Approved Projects)	Increase	Significance Threshold[b]
Minaret Road Meridian to Main Street	Residential	63.2	64.9	1.7	3.0
Old Mammoth Road North of Meridian	Residential	66.0	66.7	0.7	3.0

[a] *The dBA L_{dn} values represent the noise levels experienced at approximately 75 feet from the roadway centerline.*

[b] *As described under the Thresholds of Significance heading of this section, the significance threshold is three dBA if the noise increase would meet or exceed the Town's noise level standard for the affected land use (see Table IV.I-4, Town of Mammoth Lakes Exterior Noise Limits). However, if the noise levels remain below the Town's noise level standard for the affected land use, then an increase in noise levels of five dBA or greater would be considered significant.*

Source: Christopher A. Joseph and Associates 2006. Calculation data and results are provided in Appendix H to this Draft EIR.

As shown in Table IV.I-12, implementation of Project would increase local noise levels off-site by a maximum of 1.7 dBA Ldn at the segment of Minaret Road located between Meridian Boulevard and Main Street. Because the increase in local noise levels along roadway segments resulting from implementation of the Project would not exceed the established thresholds of significance, this would not represent a substantial permanent increase in ambient noise levels. Therefore, this impact would be considered ***less than significant*** and no mitigation measures are required.

On-Site Non-Vehicular Noise

Upon completion of the proposed residential developments associated with the Project, sources of noise that would be generated by operation of the new residential buildings would include new stationary sources such as ventilation and air conditioning (HVAC) systems. In addition, limited commercial development (75,000 square feet of commercial space) would also be developed. As such, the potential commercial developments would also include stationary sources of noise such as HVAC systems as well as noise associated with delivery vehicles and loading dock activities. However, in accordance with Section 8.16.090 of the Town Noise Ordinance, the HVAC systems associated with the proposed residential and commercial developments within the Project site would be required to be sufficiently enclosed or muffled and maintained so as not to create a noise disturbance in excess of the exterior noise standards established for different land uses in the Town (see Table IV.I-4, Town of Mammoth Lakes Exterior Noise Limits). In terms of noise generated by delivery vehicles and loading dock activities at the Hotel and new commercial developments, Section 8.16.090 of the Town Noise Ordinance also prohibits the loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects between the hours of 10 P.M. and 7 A.M. in such a manner as to cause a noise disturbance across a residential property line. Furthermore, the new commercial developments

within the Project site would also be subject to the exterior noise standards established by the Town. Thus, with compliance with the provisions of the Town Noise Ordinance, potential noise impacts associated with HVAC systems and commercial loading dock activities would be considered ***less than significant*** and no mitigation measures are required.

Ice Skating Pond

As discussed previously in Section III, Project Description, the Project would be built in several phases with the construction of a Hotel, which includes an outdoor ice skating pond, occurring in the first phase. The operation of the outdoor ice skating pond would require the use of various types of equipment in order to freeze the water contained within the ice skating pond, to remove snow during the winter months and to maintain the surface of the ice. These various types of equipment all have the potential to generate noise which may exceed the Town of Mammoth Lakes Noise and Land Use Compatibility Criteria, as outlined above in Table IV.I-3.

The main piece of equipment which would be used on a consistent basis, and is key to the functionality and operation of the ice skating pond, is the Chiller. Factors influencing the amount of noise produced by the Chiller include the amount of "load" on the unit, ambient air temperature, orientation of the unit and whether or not the equipment operates at 50 Hz or 60 Hz. Although the Chiller would normally operate only during the daytime hours of 7:00 a.m. to 10:00 p.m., there may times when the Chiller operates during the nighttime hours. Therefore, at "full" load conditions, assuming a 60 Hz unit, an air temperature of 74 F or less, and an unshielded Chiller unit typical noise levels range from 66 to 68 Leq dBA at 50 feet from the source. The nearest existing sensitive receptors to the Hotel are the multi-family residences located approximately 800 feet to the southwest from the center of the ice skating pond. Therefore, as discussed previously, due to the attenuation of noise of approximately 6 dBA per double of distance, the operation of the Chiller unit may produce noise levels of approximately 41.9 to 46.9 dBA Leq. Therefore, the resulting noise level would be within the 50 – 65 dBA "normally acceptable" category for multi-family residential uses of the Land Use Compatibility Criteria shown above in Table IV.I-3 and this impact would be ***less than significant***.

In addition, noise from a Zamboni, an ice surface edger and portable snow blowers used for ice grooming and/or snow removal purposes would also produce noise during operation of the ice skating pond. Noise from these pieces of equipment typically ranges from 64 – 71 Leq dBA at 50 feet from the source. As mentioned above, the nearest existing sensitive receptors to the Hotel are the single family residences located approximately 800 feet to the southwest from the center of the ice skating pond. Therefore, as discussed previously, due to the attenuation of noise of approximately 6 dBA per double of distance, the operation of the Chiller unit may produce noise levels of approximately 42.9 to 49.9 dBA Leq. Therefore, the resulting noise level would be within the 50 – 65 dBA "normally acceptable" category for multi-family residential uses of the Land Use Compatibility Criteria shown above in Table IV.I-3 and this impact would be ***less than significant***.

Furthermore, future multi-family residential units would be located approximately 100 to the north of the proposed ice skating pond. As discussed previously, the maximum noise levels typically generated during operation of an ice skating pond range from 64 – 71 Leq dBA and are generated by use of snow grooming machinery. These noise levels would be reduced to approximately 58 – 64 dBA Leq due to distance. Therefore, the resulting noise level would be within the 50 – 65 dBA "normally acceptable" category for multi-family residential uses of the Land Use Compatibility Criteria shown above in Table IV.I-3 and this impact would be ***less than significant***.

Impact NOISE-5 Excessive Operational Groundborne Vibration

Impacts of groundborne vibration associated with Project construction are discussed above under Impact Noise-2. The Project does not involve any other sources of groundborne vibration and groundborne noise. Therefore, Project impacts associated with excessive operational groundborne vibration would be considered ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact NOISE-6 Cumulative Impacts

This cumulative impact analysis considers development of the Project in combination with ambient growth and other development projects within the vicinity of the Project. As noise is a localized phenomenon, and drastically reduces in magnitude as distance from the source increases, only projects and growth in the nearby area could combine with the Project to result in cumulative noise impacts.

Development of the Project in combination with the related projects would result in an increase in construction-related and traffic-related noise in the Project area. The nearest residential related projects to portion of the Project site where construction activities would be concentrated, however, are located approximately 1,500 feet to the north ("The Sherwin") and 1,000 feet to the west ("Snowcreek VI – The Lodges" and "Snowcreek VII"). Due to the distance of these receptors from the areas of the Project site where most construction would be concentrated, and the fact that noise attenuates at approximately six dB (A) per doubling of distance, it is not likely that construction noise would be audible at these locations, thus greatly minimizing or eliminating the potential cumulative noise effect.

Additionally, each of the related projects would be subject to Section 15.08.020 of the Town Municipal Code, which limits the hours of allowable construction activities. Each of the related projects would also be subject to Section 8.16.090 of the Town Noise Ordinance, which establishes noise standards for mobile and stationary construction equipment. With conformance with Sections 15.08.020 of the Town Municipal Code and 8.16.090 of the Town Noise Ordinance, the cumulative construction noise impact would be ***less than significant***.

Future construction associated with the related projects could result in a cumulatively significant impact with respect to temporary or periodic increases in ambient noise levels. Construction noise is localized in

nature and decreases substantially with distance. Consequently, in order to achieve a substantial cumulative increase in construction noise levels, more than one source emitting high levels of construction noise would need to be in close proximity to the Project. While cumulative development in the Project vicinity would include a total of 41 related projects, two of which are as close as approximately 1,000 feet from the areas of the Project site where most construction would occur, the construction activities for each related project would only occur during the permitted hours designated in the Town's Municipal Code, and thus would not occur during recognized sleep hours for residents or on days that residents are most sensitive to exterior noise. In addition, the construction activities would also be required to comply with the construction noise standards established in the Town Noise Ordinance. As such, while the physical impact from an increase in ambient noise levels would occur from the construction activities associated with the related projects, an adverse effect on nearby residents would not occur. Therefore, the cumulative impact of the Project would be ***less than significant***.

Cumulative development in the Town would not result in the exposure of people to or the generation of excessive groundborne vibration, due to the localized nature of vibration impacts and the fact that all construction would not occur at the same time and at the same location. As mentioned above, the construction activities for each related project would only occur during the permitted hours designated in the Town's Municipal Code, and thus would not occur during recognized sleep hours for residents or on days that residents are most sensitive to exterior noise. In addition, the construction activities would also be required to comply with the construction vibration threshold established in the Town Noise Ordinance. As such, future cumulative development would result in a less-than-significant cumulative impact. Therefore, the cumulative impact of the Project would also be ***less than significant***.

The cumulative baseline and cumulative plus Project ambient noise levels are presented in Table IV.I-13. As shown in Table IV.I-13, cumulative development would increase local noise levels by a maximum of 0.7 dBA Ldn at the segment of Old Mammoth Road located between Minaret Road and Meridian Boulevard. Because the increase in local noise levels along roadway segments resulting from implementation of the Project would not exceed the established thresholds of significance, this would not represent a substantial permanent increase in ambient noise levels. Therefore, this impact would be considered ***less than significant*** and no mitigation measures are required.

Table IV.I-13
Cumulative Roadway Noise Levels

Roadway Segment	Existing Noise Sensitive Uses	Noise Levels in dBA L_{dn} at 75 feet[a]			
		Cumulative (Existing Plus Approved Projects)	Cumulative Plus Project	Increase	Significance Threshold[b]
Minaret Road	Residential	61	61.3	0.3	3.0
Old Mammoth Road West of Minaret Road	Residential	58.7	58.7	0.0	3.0
Minaret Road to Meridian Boulevard	Residential	62.9	63.6	0.7	3.0

[c] *The dBA L_{dn} values represent the noise levels experienced at approximately 75 feet from the roadway centerline.*

[d] *As described under the Thresholds of Significance heading of this section, the significance threshold is three dBA if the noise increase would meet or exceed the Town's noise level standard for the affected land use (see Table IV.I-4, Town of Mammoth Lakes Exterior Noise Limits). However, if the noise levels remain below the Town's noise level standard for the affected land use, then an increase in noise levels of five dBA or greater would be considered significant.*

Source: Christopher A. Joseph and Associates 2006. Calculation data and results are provided in Appendix H to this EIR.

With regard to stationary sources, it is also not expected that there would be a cumulatively significant impact. The major stationary source of noise that will be introduced into the Snowcreek Master Plan Area would likely be HVAC equipment for new residential and commercial developments. However, in accordance with Section 8.16.070 of the Town Noise Ordinance, all new developments within the Town would also be subject to the exterior noise standards established by the Town for different land uses (see Table IV.I-4, Town of Mammoth Lakes Exterior Noise Limits). Furthermore, in accordance with Section 8.16.090 of the Town Noise Ordinance, the HVAC systems associated with new developments in the Town would be required to be sufficiently enclosed or muffled and maintained so as not to create a noise disturbance in excess of the exterior noise standards established for different land uses in the Town. Thus, with compliance with the provisions of the Town Noise Ordinance, potential noise impacts associated with HVAC systems would be ***less than significant*** and no mitigation measures are required

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of Mitigation Measures NOISE-1a -1b, and -1c listed above, which would require the implementation of BMPs during construction at the Project site to reduce construction noise levels, construction-related noise impacts associated with the Project would be reduced to a ***less than significant*** level.

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IV. ENVIRONMENTAL IMPACT ANALYSIS
J. POPULATION & HOUSING

INTRODUCTION

This section addresses the following: (1) the potential of the Project to induce population and/or housing growth; (2) the degree to which the Project would cause growth in comparison to adopted population and housing growth forecasts; (3) the consistency of the Project with adopted regional and local policies; and (4) the potential of the Project to affect the balance between jobs and housing. In addition, the potential cumulative population and housing impacts of the Project in combination with all known related projects are evaluated in this section.

ENVIRONMENTAL SETTING

Existing On-site Physical Conditions

The portions of the Project site where development would occur under the Project are currently undeveloped. As such, these portions of the Project site do not contain any existing residents, employees, or livable housing units.

Housing

The total number of housing units in the Town increased 12 percent from 1990 to 2000 as shown in Table IV.J-1. Multi-family housing experienced the greatest increase during this time period. By 2024 the total number of housing units in the Town is anticipated to increase approximately 69 percent from 9,871 in 2004 to 16,710 in 2024.

Table IV.J-1
Housing Unit Growth Trends (1990 – 2024)

Year	Units	Numerical Change	Percent Change
1990	7,102	-	
2000	7,960	858	12%
2004	9,871	1,911	24%
2024	16,710	6,839	69%

Source: United States Census Bureau, Census 2000; www.census.gov, CAJA staff, December 8, 2006.

General Plan Housing Element

Household Tenure

Census data concluded that there were 2,814 households residing in Mammoth Lakes during 2000, 53.9 percent of which were classified as family households. Although there are more housing units in Mammoth Lakes than there are households, housing units are not affordable or available for the average resident. Census 2000 data shows the housing unit count to be 7,960, but only 2,814 of these housing units are occupied year round. The remaining 4,579 housing units (57.5 percent) are owned by second homeowners and are utilized on a seasonal, recreational, or occasional basis.[1] Additionally, of the 2,966 households in 2004, 2,560 were employee households.[2]

Overcrowded Households

The United States Census Bureau defines overcrowding as a housing unit that is occupied by more than one person per room (not including kitchens and bathrooms). Overcrowded households are defined as those with 1.01 or more persons per room, and units with more than 1.5 persons per room are considered severely overcrowded.

According to the 2000 census, 301 households in Mammoth Lakes are living in overcrowded conditions compared to the 164 units that were overcrowded in 1990. Mammoth Mountain Ski Area employees have an average of 2.8 roommates compared to the 2.3 roommates of the average Mammoth area employee. These numbers may not be reflected in census data because many ski area employees are not permanent residents.

In comparison with the statewide average for overcrowding (15.2 percent), census data shows the Town of Mammoth Lakes has fewer overcrowded units than the average California community. However, the true number of overcrowded households is likely greater than reflected in the census due to seasonal overcrowding, which was not accounted for in the census data.

Housing Units by Type

As noted, although there are more housing units located in Mammoth Lakes than there are households, the majority of these units are second homes for the owners and used for seasonal, recreational, or occasional occupation. Census data show single-family detached homes are the most common form of

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[1] *Eastern Sierra Housing Needs Assessment, prepared by Housing Collaborative, Inc., December 2004, page 58.*

[2] *Eastern Sierra Housing Needs Assessment, prepared by Housing Collaborative, Inc., December 2004, page 62.*

residential housing (3,309 units). However, the combined total for multi-family units is higher (5,721 units).[3]

Regional Housing Need

A Regional Housing Needs Allocation Plan is required pursuant to Section 65584 of Article 10.6 of state housing element law. The housing need is the minimum number of units needed to serve the Town of Mammoth Lakes, to project household population and to accommodate a normal vacancy rate and the expected loss of housing stock. In a January 8, 2002 letter, the State of California Department of Housing and Community Development (HCD) provided a range of numbers of housing units for which the Town of Mammoth Lakes should plan (refer to Table IV.J-2).[4]

Table IV.J-2
Mammoth Lakes Fair Share of Regional Housing Needs (2001- 2008)

Income Group	Number	Percent
Very Low	60	20.2%
Low	53	17.9%
Moderate	69	23.2%
Above Moderate	114	38.4%
Total	**296**	**99.7%**
Source: Regional Housing Need Plan		

Affordable Housing Mitigation Regulations

The Town Council adopted Affordable Housing Mitigation Regulations (Chapter 17.36) in 2006. The regulations address the development of workforce housing sufficient to mitigate the increased workforce housing demand created by a project. In order to determine the potential impact of a project, a formula is used to estimate the number of fulltime equivalent employees for each business type. The result is that projects are required to provide housing for the estimated number of its fulltime equivalent employees (FTEE). For every one FTEE generated by a project, a minimum of 250 square feet of living space is required to fulfill regulations.

A housing mitigation development plan must be submitted along with the Project generating the need for workforce housing. On-site housing is preferred. However, the regulations do allow Alternate Housing Proposals. These may deviate from the requirement for new construction of on-site workforce housing including provision of off-site housing, in-lieu fees, establishing a housing credit, or other alternate mitigation plan. Alternate Housing Proposals may be approved if the Town finds the proposal provides a greater community workforce housing benefit. Affordability levels range from 80 percent to 200 percent

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[3] *California Department of Finance, Demographic Research Unit, Table 2: E-5 City/County Population and Housing Elements, January 1, 2006.*

[4] *Town of Mammoth Lakes. - Housing Element, December 2003, page 17.*

of median household income with the majority being affordable to households making median income or less.[5]

Commercial projects less than 5,000 square feet, residential projects with less than 5 units, visitor lodging projects with fewer than 4 rooms, and all projects in the industrial zones may pay a fee in lieu of providing housing. To encourage on-site housing in commercial projects beyond the mitigation regulations, shared parking is permitted.[6]

Population

Population Characteristics and Growth Forecasts

The Town of Mammoth Lakes is experiencing growth rates similar to the rest of the Eastern Sierra region. As of 2000, the full-time resident population was 7,094 with a growth rate of 48 percent from 1990 to 2000. The permanent population at build-out is expected to grow from approximately 7,600 residents in 2004 to approximately 11,000 people in 2024 (refer to Table IV.J-3).[7] Actual build-out population will depend on the types and density of units actually developed (not all properties are anticipated to develop at the maximum density).

Table IV.J-3
Population Growth Trends (1970 – 2024)

Year	Population	Numerical Change	Percent Change
1970	3,528	-	-
1980	3,929	401	11%
1990	4,785	856	22%
2000	7,094	2,309	48%
2003	7,495	401	6%
2004	7,569	74	1%
2024	11,000	3,431	45%

Source: Census Bureau and Town of Mammoth Lakes – General Plan Housing Element, December 2003. .

The Town is prone to large fluctuations in the total non-resident population because of the seasonal nature of its tourism economy. During peak tourist seasons, the community and Mammoth Mountain Ski Area require many more employees (more than can be filled by the full-time resident community). As a result, the resident population increases by 2,000 during the peak tourism season.

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[5] *Town of Mammoth Lakes Revised Draft Program EIR, 2005 General Plan Update – Population, Housing and Employment, October 2005, page 4-231.*

[6] *Ibid.*

[7] *Town of Mammoth Lakes - Housing Element, December 2003, page 8.*

Employment

Due to Mammoth Lakes' tourism-based economy the majority of the population living in Mammoth Lakes is employed in the retail and services industry, education, and health and social services as shown in Table IV.J-4. It is this employment group that is most profoundly impacted by increasing real-estate values and rents. Escalating real-estate values are forcing many employees to relocate further and further away from their place of full-time employment. Many households must spend more than 30 percent of their monthly income on housing, or are faced with increased commuting costs and potentially decreased living standards.[8]

Table IV.J-4
Employment by History 2000

Industry Type	2000	
	Number	Percent
Agriculture, forestry, fishing and hunting, and mining	40	.9
Construction	350	8.1
Manufacturing	113	2.6
Wholesale trade	77	1.8
Retail trade	424	9.8
Transportation and warehousing, and utilities	60	1.4
Information	46	1.1
Finance, insurance, real estate and rental and leasing	166	10.8
Professional, scientific, management, admin.	379	8.8
Educational, health and social services	482	11.2
Arts, entertainment, recreation, and services	1,598	37.1
Other services	117	2.7
Public administration	161	3.7
Total	**4,013**	**100**

Source: Census Bureau (2000 Census, SF3: P49)

ENVIRONMENTAL IMPACTS

Thresholds of Significance

As stated in §15126.2(d) of the *CEQA Guidelines*, "It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment." Based on Appendix G of the *CEQA Guidelines*, a project would have a significant impact on population and housing resources if the project would:

[8] *Town of Mammoth Lakes Housing Element, December 2003, pages 8-9.*

(a) Induce substantial population growth in an area, either directly (for example, through extension of roads or other infrastructure);

(b) Displace substantial numbers of existing housing necessitating the construction of replacement housing; or

(c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

As discussed in the Initial Study that was prepared for the Notice of Preparation (see Appendix A to this EIR), there would be no impact with respect to thresholds (b) and (c) listed above because the portions of the Project site to be developed under the Project are currently undeveloped and the Project would therefore not displace existing housing or people. Therefore, only threshold (a) listed above is addressed in the following discussion.

Project Impacts and Mitigation Measures

Impact POP-1 Population Growth Associated with Employment

Population Growth Due to Temporary Jobs

The Project would result in employment opportunities during its construction period. However, construction-related employment opportunities would not likely result in household relocation by construction workers to the vicinity of the Project site for various reasons, including the following:

- Construction employment has no regular place of business; rather, construction workers commute to job sites that may change several times a year.
- Many construction workers are highly specialized (e.g., crane operators, steelworkers, masons, etc.) and move from job site to job site as dictated by the demand for their skills.
- The work requirements of most construction projects are also highly specialized, and workers are employed on a job site only as long as their skills are needed to complete a particular phase of the construction process.
- Some construction workers would likely be drawn from the construction employment labor force (eight percent of the total labor force) already present in the Town and surrounding communities. The construction of the Hotel would require specialized workers (as mentioned above), and the developer would likely employ these workers from outside the Town and area.

Consequently, Project-related construction workers would not be likely to relocate their place of residence as a consequence of working on the Project. Therefore, Project impacts would be ***less than significant*** and no mitigation measures are required.

Population Growth Due to Permanent Jobs

The Project includes 340,000[9] square feet of Hotel rooms/suites and Private Residence Club (PRC)/suite units, 25,000 square feet of Conference and Meeting space, 12,900 square feet of Spa/Wellness Center space, 10,000 square feet of Restaurant/Bar/Lounge space, 10,000 square feet of Retail space, a 3,500 square foot Market/General Store, 3,000 square foot Golf Pro Shop, 8,000 square foot Residence's Club/Management Offices, 1,700 square foot Outfitters Cabin and a 900 square foot Natural Resources and Historic Interpretive Center. In addition to the new residents associated with the proposed residential uses, the Project would create an estimated 925 FTEEs (as shown in Table IV.J-5). These employees would either: (1) live in the residences constructed as part of the Project, (2) already reside in the Town, (3) commute to the Town, or (4) relocate to the Town. The State of California documents the Town of Mammoths Lakes' unemployment rate at 5.3 percent, totaling 300 people in May 2007.[10] Therefore, some of the employment associated with the Project could be filled by persons from the existing employment base in the Project area and/or by future residents at the Project site. However, for a conservative analysis, it is assumed that all 925 employees would relocate to the area, introducing 925 employee-related residents to the Town through indirect population growth due to permanent jobs. This is consistent with the growth anticipated in the 2007 General Plan. Therefore, impacts associated with population growth due to permanent jobs would be ***less than significant***.

Table IV.J-5
Estimated Employee Generation

Development Area	Square Feet	FTEE Generation Rate (per Square Foot)	Estimated Number of FTEE[(b)]
Non-Residential Space	75,000	0.00042	32
Hotel/Condo	340,000	0.0005	170
Homes (Residential Condo)	1,445,000 [(a)]	0.0005	723
		Total	**925**

Notes:
(a) Based on an average of 850 square feet per one half of a dwelling unit (i.e., 1,700 square feet x 850 Homes [Residential Condo Units] = 1,445,000 square feet).
(b) The final numbers will be determined when applications for use permits and tentative maps are submitted.
Sources: Town of Mammoth Lakes Title 17 Zoning, Chapter 17.36 Housing, 2006.

[9] *340,000 square feet does not include the 100,225 square feet of Back of the House/Hotel operations because this area in and of itself does not generate employees. The generation of these employees has been calculated using the square footage for the Hotel Rooms/Suites and the Private Residence Club (PRC)/suite units.*

[10] *State of California Employment Development Department http://www.calmis.ca.gov/file/lfmonth/monosub.xls*

Impact POP-2 Population Growth Associated with New Infrastructure

Infrastructure associated with the Project would serve the Project site and would not facilitate additional development as a result of increased infrastructure. Therefore, impacts associated with the development of the Project would be ***less than significant***.

Impact POP-3 Population Growth Associated with New Housing

The Project would result in construction of 1,050 dwelling units. The Project is anticipated to contribute ten percent to future buildout development (in combination with all remaining Snowcreek developments). Therefore, impacts to population growth associated with the development of the Project would be less than significant.

Additionally, the Project will comply with the Affordable Housing Mitigation Regulations Town Municipal Code 17.36 and will provide housing for the estimated 925 Full Time Equivalent Employees (FTEEs) associated with the Project. A housing mitigation development plan will be submitted along with the Project generating the need for the housing (see Appendix N). Currently, that plan includes a combination of the following measures: (1) 80 on-site units, (2) housing credits, and (3) payment of in-lieu fees. Housing will be provided at 250 square feet per FTEE. Therefore, impacts to workforce housing associated with the development of the Project would be ***less than significant***.

CUMULATIVE IMPACTS

Impact POP-4

Of the 41 related projects listed in Table II-1 (Related Projects) in Section II (Environmental Setting) of this EIR, 34 include residential developments within the Town, totaling approximately 3,674 residential units that would accommodate a population of approximately 8,900 persons. When combined with the Project's 1,050 units and estimated population of 2,562 persons, cumulative residential development amounts to approximately 4,724 units and approximately 11,462 persons.

By 2024, development of the Project in conjunction with the applicable related projects would account for approximately 28 percent of the 16,710 anticipated housing units and for approximately 19 percent of the 60,700 anticipated total population.

For the reasons noted above, development of the Project in conjunction with the applicable related projects would assist the Town in meeting its fair share of regional housing need, constituting a beneficial rather than adverse housing impact.

Because development of the Project and the related projects would help address a portion of unmet housing demand and serve anticipated population growth in the Project area, either directly (e.g., by

proposing new homes and businesses), or indirectly (e.g., through extension of roads or other infrastructure), cumulative impacts would be ***less than significant.***

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project specific impacts to population and housing would be ***less than significant***.

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IV. ENVIRONMENTAL IMPACT ANALYSIS
K. PUBLIC SERVICES

INTRODUCTION

This section addresses the subject of public services with respect to the Project and includes an examination of the existing services provided to the Project site and the impacts that the Project would have on those services. The public services section is subdivided into the following five sections: (1) police; (2) fire protection; (3) schools; (4) parks and recreation and (5) snow removal services.

1. POLICE SERVICES

ENVIRONMENTAL SETTING

The Town of Mammoth Lakes Police Department (MLPD), located at 568 Old Mammoth Road, provides police services to the Project site and surrounding area. The MLPD is responsible for providing public safety services in the town including patrol, investigations, custody of adult offenders, wildlife management, and narcotic enforcements. In addition, the MLPD offers the following specialized crime enforcement teams to protect the citizens and property of Mammoth Lakes: Patrol Division, K-9 Unit, Detective Division, Sexual Assault Response Team (SART), Wildlife Management, Drug Abuse Resistance Education/School Resource Officer (DARE/SRO), Property & Evidence, Mono County Narcotic Enforcement Team (MONET), Bicycle Patrol and a Mounted Enforcement Unit.[1] The Mono County Sheriff's Department and the California Highway Patrol also provide police protection and law enforcement in the Town and surrounding community.[2]

The MLPD currently employs 21 sworn and 6 non-sworn employees; consisting of one chief, one lieutenant, five patrol sergeants, ten patrol officers, two detectives, one narcotics investigator, one K-9 officer, one DARE/SRO officer, one community service officer, two records clerks, one executive assistant, one animal control officer and one part-time wildlife management specialist.[3] MLPD remains the only agency within Mono County that provides 24-hour patrol coverage. The average response time for emergency calls in the Project area is approximately five minutes and approximately 7 to 8 minutes for non-emergency calls. The existing level of service for the MLPD is one officer per 1,000 residents. This level of service is based on the average daily population (i.e., visitors plus permanent residents) which is currently estimated at 17,000 and is also impacted by the maximum population at one time (PAOT) which is currently at about 35,000.[4] The Town of Mammoth Lakes is subject to large

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[1] *TOML, http://www.mamothlakesspd.org, CAJA staff, December 6, 2006.*

[2] *TOML, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, December 7, 2006.*

[3] *Lieutenant Randy Schienle, Mammoth Lakes Police Department, letter correspondence, December 8, 2006.*

[4] *Ibid.*

fluctuations in resident populations and visitation levels due to its tourism based economy. MLPD officers responded to 4,478 dispatched calls, completed 2,276 reports and made 512 arrests in 2004.[5] In 2005 the MLPD officers responded to 3,824 dispatched calls for service, wrote 2,064 reports, and made 531 total arrests.[6] Table IV.K-1 shows crime trends in Mono County for 2004 and 2005.

The existing level of police service provides adequate protection to the Project area. However as this and other developments come on line additional police staffing and equipment will be required in order to maintain current levels of service, such as, response times and officer safety.[7]

Table IV.K-1
County of Mono California Crime Index (CCI), 2004-2005

	2004*		2005*		Percent Change 2004-2005	
Crimes	**Number of Crimes**	**Crimes/100,000 population**	**Number of Crimes**	**Crimes/100,000 population**	**Number of Crimes**	**Crimes/100,000 population**
Total violent crimes	44	—	59	—	—	—
Homicide	0	—	0	—	—	—
Forcible rape	8	—	9	—	—	—
Robbery	3	—	4	—	—	—
Aggravated assault	33	—	46	—	—	—
Total property crimes	356	—	254	—	-28.7	—
Burglary	147	—	102	—	-30.6	—
Motor vehicle theft	23	—	27	—		—
Larceny-theft (over $400)	186	—	125	—	-32.8	—

** The population of Mono County in 2004 was 13,568; the population in 2005 was 13,512.*
Source: Criminal Justice Statistics Center, http://ag.ca.gov/cjsc/publications/advrelease/ad/ad05/tabs/AR05_MONO_26.pdf, CAJA staff, December 6, 2006.

ENVIRONMENTAL IMPACTS

Threshold of Significance

In accordance with Appendix G of the *CEQA Guidelines*, the proposed project could have a significant environmental impact if it would:

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[5] *TOML, http://www.mamothlakesspd.org, CAJA staff, December 6, 2006.*

[6] *Lieutenant Randy Schienle, Mammoth Lakes Police Department, letter correspondence, December 8, 2006.*

[7] *Ibid.*

(a) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police services.

Project Impacts and Mitigation Measures

Impact PS-1 Police Services

In addition to the development previously constructed or approved in the Snowcreek Master Plan, the Project has been designed to integrate 1,050 residential units and approximately 75,000 square feet of resort, recreation, retail, and public amenities components. According to the United States Census Bureau Census 2000, the Project is anticipated to generate 2.44 persons per household, which would result in approximately 2,562 new residents.[8] Current population patterns in the Town indicate that households similar to those proposed by the Project are not occupied year round; therefore this is a conservative estimate. The additional number of people and activity on the Project site could result in an increase in the need for police services. The crime rate, which represents the number of crimes reported, affects the "needs" projection for staff and equipment for the MLPD. To some extent, it is logical to anticipate that the crime rate in a given area would increase as the level of activity or population increase, along with an increase in opportunities for crime. However, because a number of other factors also contribute to the resultant crime rate, such as police presence, crime prevention measures, and on-going legislation/funding, the potential for increased crime rates is not necessarily directly proportional to increases in land use activity. As shown in Table IV.K-1, the violent crime rate in Mono County did increase from 2004 to 2005, while the property crime rate decreased.

The MLPD has indicated that the construction of developments similar to the Project have brought large numbers of contractors and their laborers to the Town. Many of these workers have become problems for local law enforcement as they socialize in the local bars and restaurants after hours, become involved in drug use and other criminal activities requiring police intervention, thus creating a short-term increase in demand for police services.[9] The Project is viewed as a resort recreation center with residential uses, outdoor use areas, and multiple options for recreational and public amenities. While the Project would increase the number of persons and level of activity on the Project site, given the types of uses associated with a resort recreation center, it is reasonable to expect that the Project would not result in a meaningful increase in the amount of crime in the Project area. Further, given that the Project is not expected to generate a considerable increase in crime, the affect that the Project would have on response times would be minimal, if at all. Additionally, according to the MLPD, although additional police equipment and staff would be necessary to accommodate the Project, the additional demand for police services created

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[8] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, December 8, 2006.*

[9] *Lieutenant Randy Schienle, Mammoth Lakes Police Department, correspondence, December 8, 2006.*

by the Project would not require the need for new or altered police facilities other than those currently planned for future police staffing and facilities.[10] Therefore, Project impacts on police services would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact PS-2 Police Services

Implementation of the Project in conjunction with the related projects listed in Table II-1 (Environmental Setting) would further increase the demand for police services. Projects proposed, planned or under construction within the Town of Mammoth Lakes (Town) would significantly increase both the permanent and tourist populations. Increases in population in the Town have the potential to increase calls for police protection services. The impacts created by new development would be reduced by the incorporation of security measures (e.g., security personnel staffed at any new bars and restaurants that cater to late night crowds and private security patrolling the Project) as well as the designation of Transient Occupancy Tax (TOT) dollars and Developer Impact Fees for police services. In addition, the MLPD would continue to fund new staff positions through the Town's General Fund, which is created primarily through the Town's TOT tax base, and proactively pursue State and Federal Grants as they come available. This allows the MLPD to maintain its existing level of service of one officer per 1,000 residents. However, given the current condition of the existing police station combined with the increasing development and population in Mammoth Lakes, it is anticipated a new station will be needed for the MLPD to adequately provide police protection services in the future. While the MLPD's current facility is considered to be at capacity at the Town's current build-out, which includes the Project, it has been determined by MLPD that the addition of Project itself would not require new facilities.[11] However, the Project in conjunction with the related projects listed in Table II-1 would require that the new police facility be completed in the next two to three years or in the later phases of the Project to meet these needs. As a result, cumulative police protection impacts are considered to be ***significant***. New police facilities would be required in order to fully mitigate this significant cumulative impact to a less-than-significant level.

Because the Project in conjunction with anticipated cumulative development would result in significant impacts related to police protection services, the following mitigation measures are recommended by the MLPD:

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[10] *Chief Randy Schienle, Mammoth Lakes Police Department, correspondence, December 8, 2006.*

[11] *Ibid.*

Mitigation Measure PS-2a

Bars and restaurants that cater to late night crowds will have trained security personnel in order to reduce demand on police services.

Mitigation Measure PS-2b

Provide fair share of Developer Impact Fees to assist the MLPD in the construction of a public safety and dispatch facility and holding facilities as needed.

Mitigation Measure PS-2c

Provide private security within the site to patrol the non-residential complex in the evenings, if necessary, in order to reduce criminal behavior, and work in conjunction with law enforcement to solve crimes and crime problems.[12]

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of Mitigation Measures PS-2a, PS-2b, and PS-2c, cumulative impacts on police services would be reduced to a ***less than significant*** level. Project impacts on police services would be ***less than significant***.

[12] *Chief Randy Schienle, Mammoth Lakes Police Department, telephone correspondence CAJA staff, July 9, 2007.*

2. FIRE PROTECTION SERVICES

ENVIRONMENTAL SETTING

Fire Protection and Emergency Response Services in the Project area are provided by the Mammoth Lakes Fire Protection District (MLFPD). Mono County provides primary emergency medical paramedic services for the Project and the MLFPD serves as the backup medical service provider. The MLFPD has two stations (see Table IV.K-2) that cover the Town of Mammoth Lakes and the surrounding areas of Lakes Basin, Camp High Sierra and the Mammoth Mountain Ski Area.[13] The MLFPD has automatic mutual-aid agreements with adjoining fire departments in Long Valley and June Lake to provide backup assistance during an emergency. In addition, the MLFPD attends unified command planning meetings with the California Department of Forestry and Fire Protection (CDF) and retains the ability to respond under mutual aid requests, but as there are no CDF response lands in close proximity, the incident related interaction is limited.[14]

Table IV.K-2
Fire Stations that Serve the Project Area

Fire Station	Location	Equipment*	Staff	Approximate Distance from Project Site (miles)
MLFPD Station One	3150 Main St Mammoth Lakes, CA 93546	2 Engines 1 Ladder Truck 1 Rescue Vehicle 1 Water Tender	1 Fire Chief 5 Full-Time Firefighters 23 Volunteer Firefighters** 2 Mono County Paramedics	1.5 miles
MLFPD Station Two	1574 Old Mammoth Rd Mammoth Lakes, CA 93546	2 Engines	23 Volunteer Firefighters**	.5 mile

**Two utility vehicles vary depending on needs, and four staff vehicles are assigned to staff personnel.*
***The combined stations staff 46 volunteer personnel (paid per call); approximately half are assigned to each station.*
Source: Fire Marshal Thom Heller, MLFPD, correspondence, December 11, 2006 and Jen Daugherty, Assistant Planner, Town of Mammoth Lakes, March 29, 2007

Fire Stations

There are two fire stations that would serve the Project and surrounding area (see Table IV.K-2). The distance to the Project site from Fire Station One would be approximately one and one half miles and about one half mile from Fire Station Two, depending on the exact location of the incident. Fire Station Number One is in the process of being replaced by an updated and expanded facility. The new building

[13] *TOML, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, December 8, 2006.*
[14] *Fire Marshal Thom Heller, Mammoth Lakes Fire Protection District, correspondence, December 11, 2006.*

will be approximately 17,600 square feet with administrative offices in addition to housing for full time staff. The expansion is expected to be completed by summer 2007.[15]

Response Times

Response distance relates directly to the linear travel distance (i.e., miles between a station and a site) and the MLFPD's ability to successfully navigate the given accessways and adjunct circulation system. Roadway congestion and intersection level of service along the response route can affect the response distance when viewed in terms of travel time. The response time goal of MLFPD is less than six minutes for all incidents in MLFPD's district; this goal is generally met within the private land boundary of Town. However, adverse weather conditions are the primary reason for not successfully having the first in unit arriving within the first six minutes. Response outside the private land boundary, such as to the Lakes Basin or Mammoth Mountain Main Lodge/Inn takes longer due to additional driving time.

Staffing

Staffing for the MLFPD includes 46 volunteer personnel (paid per call) and six full-time employees, including the Chief (see Table IV.K-2). In addition, two Mono County Paramedics are based at Station Number One. Approximately half of the department members are assigned to each station. The District's offices are located at Fire Station One on Main Street. The current ratio of fire fighters per population varies due to the Town's large fluctuations in resident populations and visitation levels. The MLFPD has 50 firefighters for 7,500 permanent residents or a ratio of 1:150. At current maximum occupancy (permanent residents plus visitors), MLFPD has 50 firefighters for 41,000 population or a ratio of 1:820. The MLFPD is currently adequately staffed to meet the current demands in the MLFPD's service area.[16]

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G of the *CEQA Guidelines*, the Project could have a significant environmental impact if it would:

(a) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

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[15] *Fire Marshal Thom Heller, Mammoth Lakes Fire Protection District, correspondence, December 11, 2006 and Jen Daugherty, Assistant Planner, Town of Mammoth Lakes, March 29, 2007.*

[16] *Fire Marshal Thom Heller, Mammoth Lakes Fire Protection District, correspondence, December 11, 2006.*

Project Impacts and Mitigation Measures

Impact PS-3 Fire Services

In addition to the development previously constructed or approved in the Snowcreek Master Plan, the Project has been designed to integrate 1,050 residential units and approximately 75,000 square feet of resort, recreation, retail, and public amenities components. According to the United States Census Bureau Census 2000, the Project is anticipated to generate at 2.44 persons per household, which would result in approximately 2,562 new residents.[17] Current population patterns in the Town indicate that households similar to those proposed by the Project are not occupied year round; therefore this is a conservative estimate. Physical augmentation of the site would include removal of some of the existing vegetation and trees and development of manufactured slopes, building pads, and on-site roadways. The existing major public roads that serve the Project site are Old Mammoth Road, Minaret Road and Fairway Drive. New internal access roads would be created on the Project site. The internal roadway system would be privately owned and maintained, and would provide residential, neighborhood and emergency access. Emergency vehicles would circulate through the Project area using the internal roadway system. Secondary access for fire safety would be developed in conjunction with the roadway system to provide looped secondary emergency vehicle access and egress. Emergency access would be provided by creating a secondary access point to the Project off of Old Mammoth Road. This secondary access point is located to the west of the Old Mammoth Road/Minaret Road intersection and can be seen on Figure III-4 in the Project Description section of this Draft EIR. Fire lanes, turning radii and back up space around buildings would be designed in cooperation with local officials so as to be adequate for emergency and fire equipment vehicles. Pavements would be designed to support loads created by emergency vehicle traffic. Standpipe and fire suppression systems connections would be incorporated into architectural and landscaping design elements where practical and in locations accessible to fire equipment.

The Project would incorporate a number of fire safety features in accordance with applicable MLFPD fire-safety code and Town regulations for construction, access, fire flows, and fire hydrants. These fire safety features include, but are not limited to, ample roads, adequate building spacing, use of fire resistive building materials, and adequate vegetative clearance around structures. Considering that the Project site is undeveloped and that current use of the site is limited to open space, the Project would represent a more intense use of the site. Although the relationship is not directly proportional, more intense uses of land typically result in the increased potential for fire and emergency incidents. Thus, the Project would create an increased demand for fire protection services. However, according to the MLFPD, with the mutual-aid agreement with neighboring fire districts, their current staffing and equipment, facility levels are adequate to accommodate the Project's demand for fire protection services. In addition, the MLFPD is a participant in the Town's Emergency Operations Plan (Plan) which includes the Project area. The Plan would be revised with the development of the Project to include any needed updates or changes. It would

[17] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, December 8, 2006.*

be anticipated that only minor changes would be needed to update the plan based upon the current plans and zoning.[18] Therefore, Project impacts related to fire protection services would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact PS-4 Fire Services

The Project in conjunction with the related projects listed in Table II-1 (Environmental Setting) does cumulatively increase the demand for fire protection services in the MLFPD. This is primarily a result of the number and type of new buildings that the Project and the related projects bring to the MLFPD. The MLFPD is anticipating the hiring of more fulltime positions to increase their capability to respond to additional calls and the associated administrative work that will come along with increased development and increased traffic volumes in the Town. The increase in staff and equipment is being provided for by increases in property tax and Development Impact Fees (DIFs).[19] MLFPD recognizes that the call volume and incident complexity will continue to increase as the population and unit numbers increase. As stated previously, MLFPD is in the process of remodeling and enlarging Fire Station One in response to additional community development. The MLFPD is anticipating the hiring of more fulltime positions to increase their capability to respond to additional calls and the associated administrative work that will come along with increased development. MLFPD is also involved in the development of a strategic plan that will aid the department in planning for the future. Therefore, cumulative impacts to fire protection services would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts on fire services would be ***less than significant***.

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[18] *Fire Marshal Thom Heller, Mammoth Lakes Fire Protection District, written correspondence, December 11, 2006.*

[19] *Fire Marshal Thom Heller, Mammoth Lakes Fire Protection District, written correspondence with Jen Daugherty, Assistant Planner, Town of Mammoth Lakes, Friday, March 09, 2007.*

3. SCHOOL SERVICES

ENVIRONMENTAL SETTING

Public education services within the Town of Mammoth Lakes are provided by the Mammoth Unified School District (MUSD). The MUSD has a current enrollment of 1,158 K-12 students, and is comprised of five schools including one elementary school, one middle school, one high school, one continuation school, and one academy for excellence school.[20]

Mammoth Elementary (grades K-5), located at 2600 Meridian Boulevard; Mammoth Middle School (grades 6-8), located at 1600 Meridian Boulevard; Mammoth High School (grades 9-12), located at 365 Sierra Park Road; Sierra Continuation High School (SHS) (grades 11-12), located at 1601 Meridian Boulevard; and Mammoth Olympic Academy for Academic Excellence School (MOAAES) (grades 9-12), located at 365 Sierra Park Road are the MUSD schools that serve the Project site and surrounding area. Enrollment and class size trends for the three main schools over the last three years are shown in Table IV.K-3. Currently enrollment has been declining and an immediate growth demand is not anticipated, however additions and/or improvements for schools are likely in the long-term.[21] Due to the specialized nature and small enrollment the MOAAES and the SHS are not included in Table IV.K-3. The MOAAES first opened in the 2003-2004 school year and has maintained an average enrollment of 14 students. The SHS has maintained an average class size of 24.3 students over the past three years. Schools near the Project site experience steady enrollment. These schools are near the estimated capacity of 1,290, and according to the MUSD both the Mammoth Elementary School and the Mammoth High School are in need of major improvements. To accommodate the student body at capacity, the elementary school has added several portable classrooms and the high school has added one portable classroom.[22]

Table IV.K-3
School Data for Project and Vicinity

	Mammoth Elementary School			**Mammoth Middle School**			**Mammoth High School**		
School Year	**2002 2003**	**2003 2004**	**2004 2005**	**2002 2003**	**2003 2004**	**2004 2005**	**2002 2003**	**2003 2004**	**2004 2005**
Enrollment	554	549	536	287	283	295	376	327	317
Average Class Size	24.1	22.6	22.6	26	24.1	25.3	21.1	21.0	21.7
Pupil-Teacher Ratio	20.5	19.6	19.1	20.8	19.9	20.3	19.8	18.0	17.2

Source: California Department of Education Educational Demographics Unit DataQuest, http://dq.cde.ca.gov/dataquest/dataquest.asp, CAJA staff, April 9, 2006.

[20] *James Maxey, Business Manager, Mammoth Unified School District, correspondence, October 23, 2006.*
[21] *Ibid.*
[22] *Ibid.*

School Developer Fees

Pursuant to California Education Code §17620(a)(1), the governing board at any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities. The MUSD currently charges developer fees of $2.63 per square foot of residential development and $0.42 per square foot of commercial development.[23] Provided in §65996 of the California Government Code, the payment of such fees is deemed to fully mitigate the impacts of new development on schools services.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G of the *CEQA Guidelines*, the proposed project could have a significant environmental impact if it would:

(a) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for school services.

Project Impacts and Mitigation Measures

Impact PS-5 School Services

In addition to the development previously constructed or approved in the Snowcreek Master Plan, the Project has been designed to integrate 1,050 residential units and approximately 75,000 square feet of resort, recreation, retail, and public amenities components. According to the United States Census Bureau Census 2000, the Project is anticipated to generate 2.44 persons per household, which could result in approximately 2,562 new residents.[24] Current population patterns in the Town indicate that households similar to those proposed by the Project are not occupied year round; therefore this is a conservative estimate. As stated previously, the schools that would serve the Project experience steady enrollment and are currently at or near capacity. According to the MUSD, based on the generation rates shown in Table IV.K-4, the Project has the potential to generate approximately 475 Kindergarten through Twelfth grade students. The estimated break down is 420 elementary students, 31 middle school students, and 24 high school students. As stated previously, this is a conservative estimate based on the Project's 1,050 new

[23] *James Maxey, Business Manager, Mammoth Unified School District, correspondence, October 23, 2006.*

[24] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, December 8, 2006.*

residential units being occupied by families with children residing in Mammoth Lakes on a fulltime year round basis.

Table IV.K-4
Student Generation Rates for MUSD

Development Type	K-6 Elementary	7-8 Middle	9-12 High School
Single-Family	.4002	.0294	.0227
Source: James Maxey, Business Manager, Mammoth Unified School District, correspondence, May 1, 2006.			

Based on the developer fees established by each of the school districts, the Project applicant would be required to pay $2.63 per square foot of residential development and $0.42 per square feet of commercial development. As stated previously, provided in §65996 of the California Government Code, the payment of such fees is deemed to fully mitigate the impacts of new development on school services. Therefore, with payment of these required developer fees, Project impacts to school services would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact PS-6 School Services

Implementation of the Project in conjunction with the related projects listed in Table II-1 would further increase the demand for school services. However, as with the Project, the applicants of the related projects would be required to pay developer fees to the MSUD; payment of these fees would fully mitigate any impact that the related projects would have on school services. As stated previously, the Project's impacts to school services would be less than significant. Therefore, cumulative impacts to school services would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts to school services would be ***less than significant***.

4. PARKS & RECREATIONAL SERVICES

ENVIRONMENTAL SETTING

The Town of Mammoth Lakes Parks and Recreation Department manages over 73.78 acres of parkland accessible to residents and visitors in five active parks and open space/trail system (See Table IV.K-5). The Town owns and operates 14.26 acres of parkland and operates 27.52 acres of parkland under a Special Use Permit from the United States Forest Service (USFS). In addition, the Town and Mono County jointly operate Whitmore Park, which consists of approximately 32 acres of parkland leased from Los Angeles. The parks in Mammoth Lakes include Community Center Park, Mammoth Creek Park, Shady Rest Park, Trails End Park and Whitmore Park. The range of outdoor activities continues to expand and the Town currently has plans to expand its park and recreation facilities. The proposed expansion includes a recreation center, festival/cultural sites, improvements to the Shady Rest Park, Open Space/Parklands and a Winter Play area with parking. The proposed Shady Rest Affordable Housing project is a private development with a park element that also contributes to the overall new parks in the Town. In addition to parks, the Town has seven miles of off-road Class A bike trails totaling over six acres and numerous other nearby recreation opportunities such as Mammoth Mountain Ski Area, Smoky Bear Flat, Lakes Basin, Devil's Postpile National Monument, Red's Meadow, Bodie State Historic Park, Inyo National Forest, Mono Lake Tufa State Reserve, and the John Muir and Ansel Adams Wilderness Areas. Additionally, the eastern entrance to Yosemite National Park is 32 miles to the north of Mammoth Lakes.

Table IV.K-5
Park Areas Near the Project Site

Name	Size	Amenities	Approximate Distance from Project Site (miles)
Community Center Park	5.18 acres	- Community Center - library - children's daycare - children's play area - six tennis courts - picnic tables - walking paths - restrooms - paved parking	1.7
Mammoth Creek Park East & West	19.97 acres	- Hayden Cabin museum - picnic tables - restrooms - children's play area - art sculpture - walking trails - biking trails - paved parking	.5

Table IV.K-5
Park Areas Near the Project Site

Name	Size	Amenities	Approximate Distance from Project Site (miles)
Shady Rest Park	12.52 acres	- two soccer fields - three softball fields - restrooms - two sand volleyball courts - picnic areas/covered pavilion - a play area - paved parking	3.5
Trails End Park*	4.11 acres	- Volcom Brother's Skate Park - children's play area - water play area - horseshoe pits - restrooms - picnic pavilion	3.5
Whitmore Park	+/-32 acres	- three baseball/softball diamonds - restrooms - picnic/play areas - community swimming pool - paved parking	12.0

**Currently under development*
Source: TOML, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, April 14, 2006.
Craig Olson, Senior Planner, Town of Mammoth Lakes, correspondence, CAJA staff, July 10, 2006.
Steve Speidel, Principal Planner, Town of Mammoth Lakes, correspondence via Jen Daugherty, Assistant Planner, with CAJA staff, July 24, 2007.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the *CEQA Guidelines*, the proposed project could have a significant environmental impact if it would:

(a) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for park services.

(b) increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

(c) include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Project Impacts and Mitigation Measures

Impact PS-7 Park Services

In addition to the development previously constructed or approved in the Snowcreek Master Plan, the Project has been designed to integrate 1,050 residential units and approximately 75,000 square feet of resort, recreation, retail, and public amenities components. Implementation of the Project would result in the development of 1,050 new dwelling units and would generate approximately 2,562 new residents, including approximately 475 school-aged children, and thus, following the Town's requirement of five acres of parkland per 1,000 residents, the Project would create an additional demand of 12.81 acres (calculations shown below) for parks and recreational services.[25, 26] Current population patterns in the Town indicate that households similar to those proposed by the Project are not occupied year round, therefore this is a conservative estimate.

In accordance with the Town's requirement, the preliminary parkland dedication requirements for the Project have been calculated and are as follows:

A = .005 x UP

A = Amount of parkland required, in acres

U = Total number of approved dwelling units in the subdivision

P = Population density per dwelling unit

.005 = 5 acres of parkland per 1,000 residents

Whereas,

U = (125) Hotel Room/Suite units + (75) Private Residence Club (PRC)/suite units + (850) residential dwelling units = 1,050 total residential units

P = 2.44

Therefore,

(.005) x (1,050) x (2.44) =12.81 acres.

The Project is viewed as a resort recreation center with residential uses, outdoor use areas, and multiple options for recreational and public amenities. These include an expanded privately owned publicly accessible golf course; a golf clubhouse; an Outfitters' Cabin with a public parking area that serves as a hub for summer and winter recreational activities, and provide retail services and equipment rental to

[25] *James Maxey, Business Manager, Mammoth Unified School District, correspondence, October 23, 2006.*

[26] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, December 8, 2006.*

serve these types of activities; a Natural Resources and Historic Interpretive Center; a Market/General Store; retail space, a lounge, pool, a spa/wellness center, and an ice skating pond associated with the resort Hotel. In addition, the Project would provide a private resident's pool and a private fitness area. The Project's proposed recreational and public amenities (as listed above) in conjunction with the Town's current facilities and the collection of Developer Impact Fees (DIFs) that support the Town's park and recreation fund (as required by Town Municipal Code 15.16.081), would be adequate to accommodate the Project's demand for parks and recreational services.[27] Appendix M of this Draft EIR includes the Town's current Developer Impact Fee Schedule dated June 2007. As development occurs within the Project area, Developer Impact Fees will be paid to the Town to offset the recreational facilities and maintenance. No additional parks or recreational facilities beyond what are proposed would be required. Therefore, Project impacts to park services would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact PS-8 Park Services

As shown in Table II-1 (Environmental Setting), the related projects in the Town are primarily residential projects. Residential projects typically have the greatest impact on parks and recreational facilities, because they generate the greatest users of parks and recreational facilities – families with children. According to 2005 General Plan Update DEIR, the Town has proposed to expand its park and recreation facilities to allow the Town to maintain its standard of 5 acres per 1,000 residents.[28] Although new facilities have been proposed by the Town, construction has not begun, and therefore these facilities do not serve to mitigate the immediate need for more parks. However, as with the Project, the applicants of the related projects would be required to pay Developer Impact Fees that support the Town's park and recreation fund; payment of these fees would fully mitigate any impact that the related projects would have on park and recreational services. As stated previously, the Project's impacts to park services would be less than significant. Therefore, cumulative impacts to park services would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts to park services would be ***less than significant***.

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[27] *Town of Mammoth Lakes Municipal Code Chapter 15.16 §15.16.085 part E, CAJA staff, December 11, 2006.*

[28] *TOML, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, page 4-300, CAJA staff, December 11, 2006.*

5. SNOW REMOVAL SERVICES

ENVIRONMENTAL SETTING

The Town of Mammoth Lakes Public Works Department is responsible for snow removal on the majority of non-state and non-federal public roadways. Roadway maintenance and snow removal on private roads and private property is the responsibility of the land owners. The Town owns and operates two plow trucks and nine Caterpillar loaders, five of which are equipped with plows and four with blowers. As necessary, snow removal occurs 24 hours a day during two 12-hour shifts. On average six loaders are employed during the day shift and eight on the night shift. Snow is stored along roadways and in vacant lots. The Town currently requires a ten-foot roadside easement for snow storage on roadways with less than 60 feet of right-of-way. In a large storm event, the easement alone would not be capable of containing the entire quantity of the snow. Snow removal uses up to two thirds of each year's total maintenance and improvement budget. During intense snow storm periods, equipment and facilities have been overburdened and unable to maintain the roads clear of snow.[29]

Caltrans provides snow removal services on SR-203 from the junction of U.S. Highway 395 to the Caltrans Minaret Maintenance Station at postmile 2.4. In general, Caltrans is able to blow snow and store snow within their existing right-of-way. The Caltrans right-of-way width varies from approximately 100 feet to 385 feet. However, the Project area is not within Caltrans' SR203 snow removal jurisdiction, but within the Town of Mammoth Lakes' jurisdiction. Caltrans anticipates no change to their current SR 203 snow removal activities.[30]

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the *CEQA Guidelines*, the proposed project could have a significant environmental impact if it would:

(a) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public facilities.

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[29] *TOML, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, April 14, 2006.*

[30] *Gayle Rosander, IGR/CEQA Coordinator, Caltrans D-9, correspondence, CAJA staff, October 24, 2006.*

Project Impacts and Mitigation Measures

Impact PS-9 Snow Removal Services

In addition to the development previously constructed or approved in the Snowcreek Master Plan, the Project has been designed to integrate 1,050 residential units and approximately 75,000 square feet of resort, recreation, retail, and public amenities components. According to the United States Census Bureau Census 2000, the Project is anticipated to generate 2.44 persons per household, which would result in approximately 2,562 new residents.[31] Current population patterns in the Town indicate that households similar to those proposed by the Project are not occupied year round, therefore this is a conservative estimate.

The existing major public roads that serve the Project site are Minaret Road and Old Mammoth Road. New internal access roads would be created on the Project site. The internal roadway system would be privately owned and maintained. The management of snow at the Project site would be the sole responsibility of Snowcreek property owners or their designated representative association. Snow management would be addressed with each building to ensure that residents and visitors are provided safe and convenient access to and from lodging and within the public use areas throughout the winter season. Ground and roof level snow storage areas would be identified and would ensure sight distance is not inhibited for any mode of transportation. Landscape snow shed areas would be designated and located adjacent to the base of buildings and would be sized to accommodate the anticipated volumes of snow. Roof forms would be designed in coordination with pedestrian areas at the base of buildings. In limited areas, snow rails or fencing, may be required to prevent snow shed and ice buildup. Snow would not be permitted to shed freely into active pedestrian areas. However, minor snow depths may remain on pedestrian paved areas during heavy snow and cold periods. Snow would be removed from heavily used pedestrian paved areas, ramps and stairs. For other circulation routes and pedestrian areas, snow would be removed as soon as practical following snowfall to ensure access by emergency vehicles and easy pedestrian movement. Appropriately sized snow removal vehicles would be allowed into the pedestrian areas. As stated previously, roadway maintenance and snow removal on private roads and private property is the responsibility of the land owners. Therefore, Project impacts to the Town's snow removal services would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact PS-10 Snow Removal Services

The Project in conjunction with the related projects listed in Table II-1 would not cumulatively increase the demand for snow removal services in the Town. As shown in Table II-1, the related projects in the

[31] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, December 8, 2006.*

Town are primarily private projects and therefore, as with the Project, the private land owners would be responsible for their own snow removal services. This would fully mitigate any impact that the related projects would have on snow removal services in the Town. As stated previously, the Project's impacts to snow removal services would be less than significant. The implementation of the related projects would not require the need for new staff or new or altered public works facilities. Therefore, cumulative impacts to snow removal services would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts to snow removal services would be ***less than significant***.

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IV. ENVIRONMENTAL IMPACT ANALYSIS
L. RECREATION

INTRODUCTION

This section describes current recreational uses on the Project site, in the Town of Mammoth Lakes (Town) and in the surrounding area. Additionally, it describes ways in which the Project could lead to an increased demand for recreational facilities, physical deterioration of existing recreational facilities, or the need for the creation or expansion of recreation facilities, the construction of which could have an adverse effect on the environment.

ENVIRONMENTAL SETTING

Project Site

The Project site consists of the remaining portion of the total 345 acres in the 1981 Master Plan; the remaining acreage is approximately 237 acres. The 237 acres includes 94 acres that were added to the Master Plan area via a land exchange with the United States Forest Service (USFS). In 2005, a land exchange (2005 Land Exchange) was completed between the USFS and Snowcreek Investment Co. in order to acquire enough land to extend the existing privately owned publicly accessible nine-hole golf course to create an 18-hole course (refer to Figure III-3). The 2005 Land Exchange resulted in the acquisition of 94 acres from the USFS for golf course/recreation use. As a part of the 2005 Land Exchange process, Snowcreek Investment Company entered into a covenant with the Town that protected the exchanged parcel from residential housing, commercial lodging, transient occupancy, and being further subdivided. The covenant is monitored by the Eastern Sierra Land Trust (see Appendix K).

No developed or undeveloped parkland exists on the Project site. The Project site currently consists of disturbed and undeveloped land, the privately owned publicly accessible Snowcreek Resort nine-hole golf course and driving range, and the open space land acquired through the 2005 Land Exchange.

Regional Setting

The Town is located on the eastern flank of the Sierra Nevada in Mono County. Recreational opportunities in the area include, but are not limited to: Mammoth Mountain Ski Area, Smoky Bear Flat, Mammoth Lakes Basin, Devil's Postpile National Monument, Red's Meadow, Bodie State Historic Park, Inyo National Forest, Mono Lake Tufa State Reserve, and the John Muir and Ansel Adams Wilderness Areas. Additionally, the eastern entrance to Yosemite National Park is 32 miles to the north. The Town sits at an altitude of 7,900 feet, and the surrounding mountains rise to elevations exceeding 13,000 feet. During the summer, temperature averages range from 40 to 80 degrees Fahrenheit (F). Winter

temperatures average from 10 to 40 degrees F and snowfall at Mammoth Mountain Ski Area averages 385 inches.[1]

Local Setting

The Town's economy is tourism based, with the mainstay of the Town's tax revenue coming from the Transient Occupancy Tax (TOT), which is a 12% tax added to the rental of any lodging facility and campgrounds for stays less than a month. The 2000 census showed the base year-round population to be 7,094.[2] However, the Town is subject to large fluctuations in resident populations and visitation levels due to its tourism based economy. During the peak winter season, the population-at-one-time (PAOT) can increase to over 35,000 individuals.[3] The Town's 2003 General Plan Housing Element projects that the permanent population will reach 11,000 individuals by 2024.[4] Additionally, the Town predicts that the resident population will increase by roughly 2,000 people during peak tourism season.[5]

The Project site is located at the southeast edge of the Town, and is bordered by the Inyo National Forest, (United States Forest Service [USFS] land) on its southern and eastern sides, near the base of Sherwin Range. Mammoth Creek runs through the northern portion of the property from the west in an easterly direction. The site is relatively flat, with a slight rise along the northern and southern boundaries. The Project site supports natural and disturbed habitats including basin sagebrush, meadow, wet meadow, upper montane chaparral, alder-willow riparian, developed/disturbed areas and irrigation ditches/retention basins. The Project site has been used as pastureland for cattle grazing in the past. The surrounding Inyo National Forest land is heavily used for both summer and winter recreational activities.

Local Parks and Recreational Facilities

Town Parks

The Town owns and operates 14.26 acres of land for public park use. In addition, Mammoth Lakes has obtained approximately 32 acres of parkland through a joint operation agreement with Mono County and a lease from the Los Angeles Department of Water and Power. The Town's parkland is further supplemented by Special Use Permits from the USFS for access to a total of 27.52 acres of land. The inclusion of leased and permitted lands provides over 73.78 acres of currently developed parkland for public use. See Table IV.L-1 for acreage by individual park.

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1 *Mammoth Lakes Visitors Bureau website, http://www.visitmammoth.com/static/index.cfm?contentID=9, retrieved by CAJA staff, December 11, 2006.*

2 *Town of Mammoth Lakes - Housing Element, December 2003, page 8.*

3 *Mammoth Lakes Visitor Bureau website, http://www.visitmammoth.com/static/index.cfm?contentID=9, retrieved by CAJA staff, December 11, 2006.*

4 *Town of Mammoth Lakes - Housing Element, December 2003, page 8.*

5 *Town of Mammoth Lakes - Housing Element, December 2003, page 8.*

Table IV.L-1
Active Parkland Owned By or Available to the
Town of Mammoth Lakes

Park	Town Owned Acreage	Leased/Special Use Permit Acreage
Active Parks		
Community Center Park	5.18	0
Mammoth Creek Park East & West	4.97	+/- 15
Shady Rest Park	0	12.52
Trails End Park	4.11	0
Whitmore Park	0	+/- 32
Total Acres	***14.26***	***59.52***

Source: Town of Mammoth Lakes, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, retrieved by CAJA staff, January 3, 2007.
Mono County Assessor's Staff, correspondence with Town of Mammoth Lakes Tourism & Recreation Staff, March 2, 2007.
Steve Speidel, Principal Planner, Town of Mammoth Lakes, correspondence via Jen Daugherty, Assistant Planner, CAJA staff, July 24, 2007.

The closest Town park to the Project is Mammoth Creek Park, located on the east and west side of Old Mammoth Road near the northeast corner the Project site (refer to Table IV.L-1). The park consists of approximately 15 acres of USFS land and 4.97 acres of Town-owned land. Mammoth Creek Park East amenities include the Hayden Cabin museum, picnic tables, restroom facilities, and trails. Mammoth Creek Park West includes children's play area, art sculpture, walking and biking trails, restroom, picnic tables, trails and paved parking.

Beyond dedicated parks, the Town offers recreational programs, youth and adult sports leagues, enrichment and community service classes, swim lessons, swim team, and special events. Apart from those provided by the Town, the community contains additional public, private semi-public, and commercial recreation facilities (refer to Table IV.L-2 for cumulative totals).[6]

[6] *Town of Mammoth Lakes, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, Janunary 3, 2007.*

Table IV.L-2
Existing Recreational Facilities in Mammoth Lakes

Type of Facility	Number	Location(s)
Gymnasium	2	Mammoth High School, Snowcreek Athletic Club
Baseball/Softball/multi-use fields	7	Mammoth Elementary School, Mammoth High School, Shady Rest Park (3), Whitmore Recreation Area (2 fields)
Tennis Courts	11+	Snowcreek Athletic Club (5 courts), Community Center Park (6 courts), plus other in private developments
Swimming Pools	3+	Snowcreek Athletic Club (2), Whitmore Pool, plus others in private developments
Hot Springs	2	Hot Creek (temporary closure at this time), Red's Meadow
Meeting Facilities	6	Community Center (only Town Facility), Mammoth Mountain Inn, Sierra Nevada Inn, Canyon Lodge, Sierra Holiday Trailer Park, Fire Station, USFS Visitor Center, Mammoth Mall
Handball/Racquetball Courts	5	Snowcreek Athletic Club (5 courts)
Boating/Fishing	3	Lakes Basin, Crowley Lake, Convict Lake
Cross Country Skiing	3	Tamarack Ski Center (Lakes Basin), Sierra Meadows, Shady Rest
Downhill Skiing	2	Mammoth Mountain Ski Area, June Mountain Ski Area
Snowmobiling	4	Smokey Bear Flat, Mammoth Mountain Ski Area
Dog Sledding	2	Sierra Meadows, Shady Rest
Moto Cross	1	Mammoth Moto Cross Track
Volleyball Courts	1	Shady Rest Park
Golf	2	Snowcreek, Sierra Star
Equestrian Facilities	4	Agnew Meadows Park Station, Mammoth Pack Outfit, Sierra Meadow Equestrian Center, Red's Meadow Pack Station
Hiking/Backpacking Trailheads	5+	Agnew Meadow, Red's Meadow/Devil's Postpile, Lakes Basin (several), Sherwin Lakes, Convict Lake
Camping	18+	Shady Rest, Pine Glen, Sherwin Creek, Lake Mary, Lake George, Coldwater, Agnew Meadows (group), Agnew Meadows, Upper Soda Springs, Pumice Flat, Minaret Falls, Devil's Postpile, Red's Meadow, Convict Lake, Camp High Sierra, Mammoth Mountain RV Park
Picnic Areas	6+	Shady Rest, Mammoth Creek, Community Center, Minaret Vista, Lakes Basin, Earthquake Fault
Historic Sites	4	Hayden Cabin/Museum, Mill City, Mammoth City, and Mammoth Consolidated Mine
Interpretive Centers	2	Mammoth City Rangers Station and Visitors Center, and Mammoth Mountain Ski Area
Natural Reserves	1	Valentine Natural Reserve
Skate Boarding Park	2	Trails End Park which includes the Volcom Brother's Skate Park, and Shady Rest

Source: Town of Mammoth Lakes, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, retrieved by CAJA staff, January 3, 2007; updated by Town of Mammoth Lakes Staff, July 13, 2007.

Town Trail System

The Mammoth Lakes Trail System Plan (MLTSP) was developed as a separate component of 1990 Parks and Recreation Element of the General Plan. The MLTSP provides guidelines for trail designation and development, as well as projections for potential trails in the planning area.[7]

State Parks

Mono Lake Tufa State Reserve (Reserve) is the closest state park to the Town at a distance of roughly 29 miles. The Reserve provides interpretive walks, wildlife viewing, cross country skiing, hiking, swimming, boating, and visitor center services.

Federal Parks

Located just outside of the Town, Devil's Postpile National Monument provides additional recreational opportunities. Visitation in summer months requires the use of a shuttle, leaving from Mammoth Mountain Resort, to enter the park as private vehicle access is restricted. The Monument offers a variety of recreation prospects such as hiking and camping as well as scenic opportunities provided by the postpile geologic formations and Rainbow Falls.

The Town is surrounded by the Mammoth Ranger District of the Inyo National Forest (INF). The INF comprises more than two million acres and includes seven designated wilderness areas comprising 650,000 acres. Recreational opportunities provided by the INF include camping, hiking, picnicking, backpacking, equestrian use, and off-highway vehicle use. There are also two ski resorts on INF land that offer alpine skiing and snowboarding (Mammoth Mountain and June Mountain). Over 100 miles of groomed trails are maintained for multipurpose winter use with an additional 45 miles of cross-country ski trails.[8]

Regulatory Setting

The Quimby Act of 1965 is a State law that allows local legislative bodies to adopt requirements for the dedication of land for parks or recreational purposes, payments of fees in-lieu-of land dedication, or a combination of both, as a condition of approval for a subdivision. The requirements must be adopted by ordinance, with definite standards for determining the amount of land dedicated, or fees paid, and the requirement must have a reasonable relationship (nexus) to the use of the facilities by the future inhabitants of the subdivision. In order to meet conditions required for application of the Quimby Act, the Town included a Park and Recreation element in April of 1990, as an amendment to their 1987

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[7] *Mammoth Lakes Trail System Plan – May1991, pg 45-46*

[8] *Inyo National Forest, Stateparks.com website at http://www.stateparks.com/inyo.html, retrieved by CAJA staff on July 16, 2007.*

General Plan. The 1987 General Plan is currently in the process of being updated following a four year planning and review process. A Draft Program EIR was previously prepared and circulated regarding an earlier version of the General Plan Update. A Notice of Preparation (NOP) for the Draft Program EIR was distributed on April 25, 2003. A Draft Program EIR was prepared and distributed to the public for review from February to May 2005 for public comments. Based on the extent and range of comments received, the Town determined that the proposed General Plan should be revised to the extent that required recirculation of a Revised Draft Program EIR. The Revised Draft Program EIR was circulated for public review from October 31, 2005 to December 14, 2005. The Town is currently considering the Revised Draft Program EIR and the General Plan Update for certification and adoption at this time. Because the adoption of the Draft 2007 General Plan is an ongoing process, the standard for analysis used in this Draft EIR is based on the 1987 General Plan. Draft 2007 General Plan policies on recreation that are relevant to the Project are analyzed in Chapter 9 Parks, Open Space, and Recreation. The 1987 General Plan contains a 1990 Parks and Recreation Element that includes information related to future acquisition and development of recreation facilities. General Plan policies on recreation that are relevant to the Project are analyzed in Section IV.H (Land Use).

Section 15.16.085 of the Town's Municipal Code provides for the creation of a special fund for Parks and Recreation Facilities, and development fees that must be paid before permits will be issued. These development impact fees range from $5,228 per unit to $8,713 per unit.[9] Additionally, Section 17.16.100 stipulates multifamily projects exceeding 20 units provide 150 square feet of on-site common/recreation area per unit. This area includes recreation rooms, swimming pools, spa facilities, tennis courts, etc.[10]

The Town recently collaborated with the Inyo National Forest and the California State Parks to create a Winter Recreational Needs Assessment (WRNA) survey. A working report on the WRNA findings was published in February of 2005. The purpose of the survey was to identify the winter recreational uses for the area and to determine what future opportunities and needs remain. Concerns about increased trail and facility use, conflicts between motorized and non-motorized recreational users, and potential issues with environmental pollution and the need for land conservation were considered. The working report represents Phase I of a three-phase project. Phase II will consist of the creation of a list of specific actions and alternatives that may be considered in response to the needs and opportunities identified. Phase III will consist of environmental and regulatory review of the actions proposed in Phase II. At this time only the survey and report phase of the WRNA is complete. Both of the remaining phases are dependent upon future funding.[11]

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[9] *Town of Mammoth Lakes, June 2007 Developer Impact Fee Schedule, July 25, 2007.*

[10] *Mammoth Lakes Municipal Code, http://municipalcodes.lexisnexis.com/codes/mammothlks/, retrieved by CAJA staff January 16th, 2007.*

[11] *Mammoth Lakes Region of the Inyo National Forest Winter Recreation Needs Assessment Survey, Findings, Working Report, February 2005. Prepared by INF, Town, & CSP, with assistance from Center for*

The Survey revealed that, based on 691 respondents, cross-country skiing, downhill skiing, and snowmobiling are the top three winter uses in the area. Nineteen percent of the respondents commented that improvement is needed in some areas. Snowmobile users requested more open accessible areas, with access to the Sherwin Range and the Mammoth Lakes Basin, while cross-country skiers and snowshoe interests requested improvements to groomed trails around the Town and increased buffers between snowmobile areas. Other respondents requested more snow parks with adequate parking and restrooms, more back-country warming huts, and more opportunities to ice-skate outdoors.

ENVIRONMENTAL IMPACTS

Threshold of Significance

In accordance with Appendix G of the *CEQA Guidelines*, the proposed project could have a significant environmental impact if it would:

(a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

(b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Project Impacts and Mitigation Measures

Impact REC-1

As previously discussed, the Project site consists of the remaining portion of the total 345 acres in the 1981 Master Plan; the remaining acreage is approximately 237 acres. The 237 acres includes 94 acres that were added to the Master Plan area via a land exchange with the United States Forest Service (USFS) in 2005.

As discussed in detail in Section III (Project Description), the Project is intended to fulfill the vision of the previously approved 1981 Master Plan. Upon final approval of the Project, Snowcreek VIII, Snowcreek Master Plan Update – 2007, will effectively replace the existing 1981 Snowcreek Master Plan for the acres yet to be developed.

In addition to the development previously constructed or approved in the Snowcreek Master Plan, the Project has been designed to integrate 1,050 residential units and approximately 75,000 square feet of resort, recreation, retail, and public amenities components. Implementation of the Project would result in the development of 1,050 new dwelling units and would generate approximately 2,562 new residents,

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Collaborative Policy, and California State University, Sacramento. Retrieved from http://www.fs.fed.us/r5/inyo/news/2005/02/winter_needs_assessment.shtml by CAJA staff, December 11, 2006.

including approximately 475 school-aged children, and thus, would create an additional demand of 12.81 acres (see calculations below) for parks and recreational services.[12, 13] Current population patterns in the Town indicate that households similar to those proposed by the Project are not occupied year round, therefore this is a conservative estimate. The Project is viewed as a resort recreation center with residential uses, outdoor use areas, and multiple options for recreational and public amenities. These include: an expanded privately owned publicly accessible golf course; a publicly accessible golf clubhouse; a public parking area and publicly accessible Outfitters' Cabin designed to serve as a hub for summer and winter recreational activities, and provide retail services and equipment rental for these types of activities; a publicly accessible Natural Resources and Historic Interpretive Center (Interpretive Center); a publicly accessible Market/General Store; retail space; a publicly accessible lounge; private fitness area; private resident's pool; publicly accessible spa/wellness center; and publicly accessible ice skating pond/rink associated with the resort Hotel.

In accordance with the Town's requirement, the preliminary parkland dedication requirements for the Project have been calculated and are as follows:

A = .005 x UP

A = Amount of parkland required, in acres

U = Total number of approved dwelling units in the subdivision

P = Population density per dwelling unit

.005 = 5 acres of parkland per 1,000 residents

Whereas,

U = (125) Hotel Room/Suite units + (75) Private Residence Club (PRC)/suite units + (850) residential dwelling units = 1,050 total residential units

P = 2.44

Therefore,

(.005) x (1,050) x (2.44) =12.81 acres.

Following the Town's requirement of five acres of parkland per 1,000 residents, the parkland requirement for the Project is approximately 12.81 acres. The Project would expand the existing privately owned, but publicly accessible golf course, into the 155-acre Snowcreek Golf Course. In addition, as previously stated the Project would provide other recreational facilities including a publicly accessible golf clubhouse, Outfitters' Cabin, Interpretive Center, and ice skating rink/pond. The Project's proposed

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[12] *James Maxey, Business Manager, Mammoth Unified School District, correspondence, October 23, 2006.*

[13] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, December 8, 2006.*

recreational and public amenities, as listed above, in conjunction with the Town's current facilities and the collection of Developer Impact Fees (DIFs) that support the Town's park and recreation fund would be adequate to accommodate the Project's demand for parks and recreational services.[14] As development occurs within the Project area, DIFs will be paid to the Town to offset the recreational facilities and maintenance. Appendix M of this Draft EIR includes the Town's current Developer Impact Fee Schedule dated June 2007. Therefore, with payment of DIFs and the Project's provision of new publicly available recreational amenities, the Project's impacts on Town parkland would be ***less-than-significant*** and no mitigation measures are required.

The National Forest land surrounding the Project site will likely experience increased use as a result of Project implementation. In particular, the development of the Outfitters' Cabin as a designated access point to the Inyo National Forest would potentially serve to focus backcountry recreational trip launches at a location that is presently frequented by fewer visitors. This increase may potentially lead, over time, to some level of deterioration of these areas. However, no formal capacity study has been completed to determine excessive use levels within the Inyo National Forest.[15] The USFS has a number of management options available to reduce and mitigate visitor impacts including limiting visitor numbers, redirection to more suitable areas, and impacted area closures.[16] The Inyo National Forest recognizes that recreation, as identified in the Inyo National Forest Land Resource Management Plan (LRMP) is the most important public resource available on the Inyo National Forest.[17] In addition, the development of the Outfitters' Cabin as a focal point for entry into the Inyo National Forest would alleviate existing incursions to private property by backcountry users and would serve to reduce impacts observed at other access routes in current use. The Project would not physically alter or produce any direct impact on land within the Inyo National Forest. Therefore, potential impacts to the National Forest land adjacent to the Project site would be ***less-than-significant*** and no mitigation measures are required.

Impact REC-2

Implementation of the Project would result in the removal of privately owned publicly accessible driving range facilities located in the eastern section of parcel 40-070-10 and the northeast corner of parcel 40-070-11. Additionally, the existing privately owned publicly accessible nine-hole Snowcreek Golf Course would be temporarily closed for minor changes. However, development on the Project site would include a resort component with recreational elements and additional, stand-alone recreation components. Resort component recreation elements available to paying Snowcreek guests and residents consist of a fitness

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[14] *Town of Mammoth Lakes Municipal Code Chapter 15.16 §15.16.085 part D. and 15.16.081 part D, CAJA staff, June 21, 2007.*

[15] *Phone correspondence with Mike Schlafmann, Inyo National Forest Winter Recreation Specialist, January 9, 2007, CAJA Staff..*

[16] *Ibid.*

[17] *USFS Comment Letter on the Town's 2005 General Plan Update EIR to Bill Taylor, Deputy Community Development Director from Molly Brown, District Ranger of Mammoth/Mono Districts, December 24, 2005.*

area, a pool, a spa/wellness center, and an ice skating pond. While the ice skating pond/rink is considered part of the resort Hotel, it would be open to the general public for a fee. Stand-alone privately owned publicly accessible for a fee recreation components consist of a golf clubhouse and expansion of the existing nine-hole golf course to 18 holes. The Interpretive Center and an Outfitters' Cabin would be available to the general public. The Interpretive Center would include free public restrooms as well as a space to accommodate meetings and to dispense educational materials. The Outfitters' Cabin would provide free public parking and would serve as the hub of year-round recreational activities such as hiking, biking, fishing, cross country skiing, snow-shoeing, hay rides and sleigh rides. Retail services and equipment rental would be provided to serve these types of activities.

A detailed analysis of the potential impacts of the construction of the on-site recreational facilities associated with the Project is presented throughout Section IV (Environmental Impact Analysis) of this Draft EIR. No policies concerning the availability of golf driving ranges have been adopted by the Town. Thus, despite the removal of a privately owned publicly accessible driving range and the temporary loss of use of the existing nine-hole golf course for minor changes, the Project would increase the overall amount of public and private recreation opportunities in the Mammoth Lakes area. Therefore, Project impacts affecting Town recreation facilities would be ***less-than-significant***.

Impact REC-3

As previously stated, the Project consists of build-out of the remaining approximately 237 acres of the Master Plan area in order to fulfill the vision of the previously approved 1974 and 1981 Master Plans. The Project is viewed as a resort recreation center with residential uses, outdoor use areas, and multiple options for recreational and public amenities (as described in Impact REC-1). However, the Project also relies on existing recreational elements in the surrounding area. These recreational elements include, but are not limited to, the Mammoth Mountain Ski Area, the Sherwin Range, Kerry Meadow Trail and the Inyo National Forest. Because much of the Project relies on and will create some additional demand upon these existing recreational elements, the Project will have some impact, but not a significant impact, on existing recreational resources, as previously discussed.

The privately owned Project site has periodically been crossed by pedestrians and hikers for purposes of obtaining access to the Sherwin Range and Inyo National Forest. The development of the Project will require persons who may have previously crossed the Project site to now hike around the perimeter of the Project site to reach these areas. The Project applicant has proposed to provide a portal along the eastern edge of the Project site. That access, while not as convenient as the current access points and routes, will be permitted and lawful and will be enhanced with a facility that will provide opportunities for persons entering those public lands to rent ski equipment and other sports equipment. With this portal and the associated amenities, the impact will be ***less than significant***.

CUMULATIVE IMPACTS

Impact REC-4

As shown in Table II-1 (Environmental Setting), the related projects in the Town are primarily residential projects. Residential projects typically have the greatest impact on parks and recreational facilities, because they generate the greatest users of parks and recreational facilities – families with children. Therefore, development in Mammoth Lakes will continue to increase demand at all levels for recreational opportunities and facilities.

As of October 2005, the Town of Mammoth Lakes has owned or leased 41.78 acres of parkland available to the public as neighborhood and community parks (e.g., Whitmore Park and Pool is a regional park). Given the 2000 census figure of 7,094 residents and the Town requirement of five acres of parkland per 1,000 residents, 35.47 acres of parkland are requisite. The Town population is projected to reach 11,000 residents by 2024.[18] Following Town guidelines, 58 acres of parkland will be required at that time. The Town will need to acquire an additional 16.22 acres of parkland beyond its current holdings in order to satisfy this projected demand.

According to the draft 2005 General Plan Update Draft EIR, the Town has proposed the expansion of its park and recreation facilities to allow the Town to maintain its standard of 5 acres per 1,000 residents.[19] Table IV.L-1 includes planned public parkland which would help to meet the requirements of the build-out population. Although new facilities have been proposed by the Town, construction has not begun, and therefore these facilities do not serve to mitigate the immediate need for more parks. However, as with the Project, the applicants of the related projects would be required to pay DIFs that support the Town's park and recreation fund; payment of these fees would fully mitigate any impact that the related projects would have on park and recreational services. As stated previously, the Project's impacts to park services would be less than significant. Therefore, cumulative impacts to park services would be ***less than significant*** and no mitigation measures are required.

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[18] *Town of Mammoth Lakes - Housing Element, December 2003, page 8.*

[19] *Town of Mammoth Lakes, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, December 11, 2006.*

State and Federal Lands

The state and federal parks and forests in the area attract visitors from not only the Sierra Nevada region, but greater California, and the rest of the country as well. As the population in the region increases, usage of these state and federal lands is likely to increase as well. Consequently, increased usage could result in potentially adverse impacts.

As discussed above under Project Impacts, the state and federal park and forest systems have several tools available to address environmental impacts resulting from both existing and future visitor usage such as fee collection, the ability to place limits on numbers of visitors, and periodically restricting or closing access to certain areas. The decision to use any or all of these measures, as well as others, would be dependent upon observed need and patterns of use and would be made by state and federal land managers responsible for protecting and managing visitor use within each of these areas. Therefore, cumulative environmental impacts to state or federal park and forest lands as a result of the Project would be ***less-than-significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project specific impacts to recreation would be ***less than significant***.

IV. ENVIRONMENTAL IMPACT ANALYSIS
M. TRAFFIC/CIRCULATION

INTRODUCTION

The information in this section is based primarily on the Traffic Impact Analysis prepared by LSA Associates, Inc. in December 2006 and revised in July 2007 (included in Appendix J of this Draft EIR).

Study Intersections and Forecast Scenarios

Analysis Scenarios

Five analysis scenarios were utilized in the Traffic Impact Analysis:

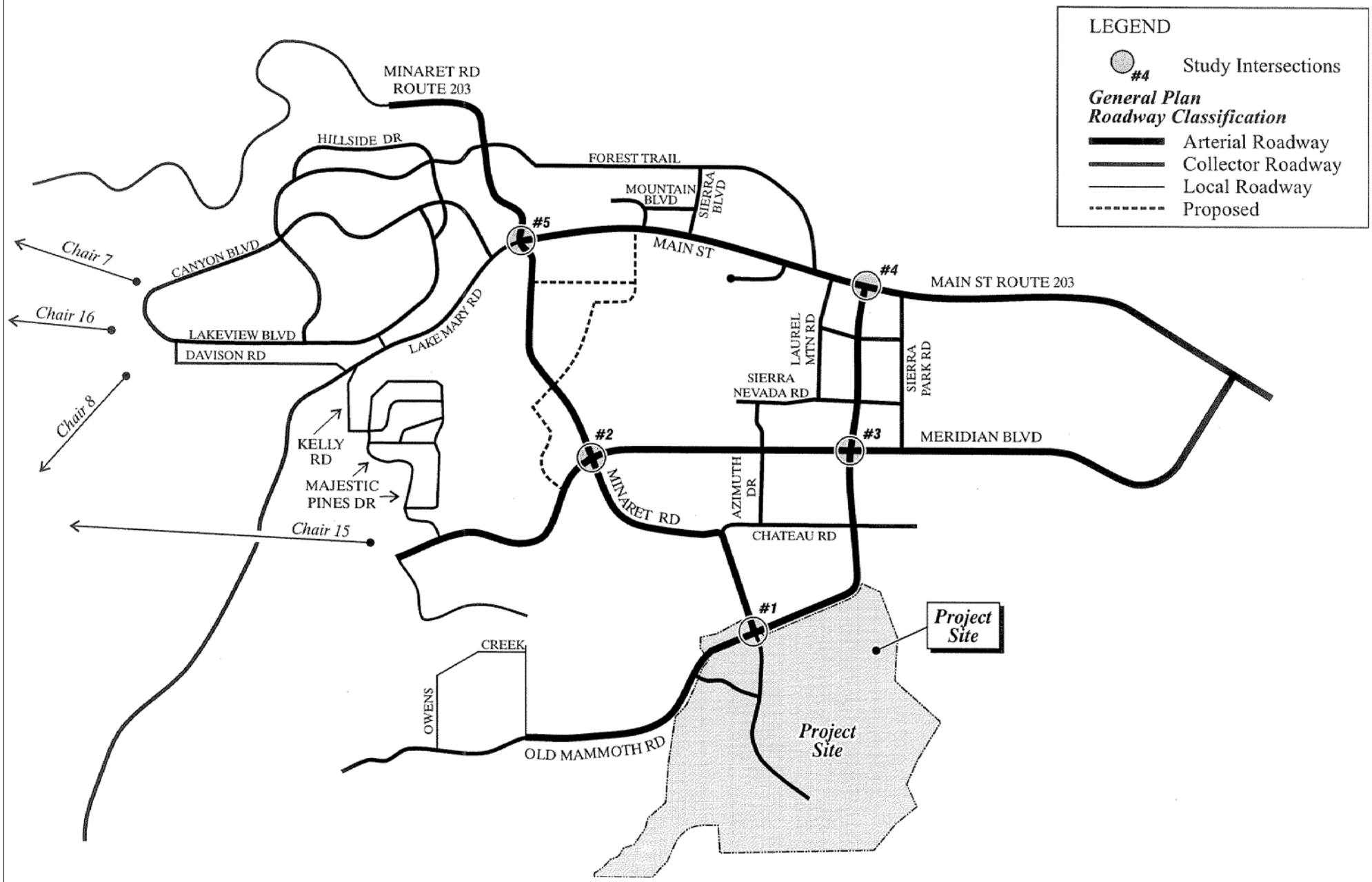
- Existing Conditions (2005)
- Cumulative Baseline Conditions (existing plus approved projects [2009])
- Existing Plus Project Conditions
- Cumulative Plus Project Conditions
- Long-Range Town Build Out: Alternative 2—Existing General Plan

Project Study Intersections

Intersection operations were evaluated for five intersections for the analysis scenarios described above. Figure IV.M-1 shows the study area intersections and Town of Mammoth Lakes General Plan Roadway Classifications for the surrounding circulation system.

Study Area Intersections

1) Minaret Road/Old Mammoth Road
2) Minaret Road/Meridian Boulevard
3) Old Mammoth Road/Meridian Boulevard
4) Old Mammoth Road/Main Street
5) Minaret Road/Main Street



Source: LSA, 2007.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

NORTH

Figure IV.M-1
Study Area Intersections and Circulation System

Analysis Methods

Typical winter Saturday peak-hour baseline conditions were used to analyze traffic impacts for the existing and cumulative (existing plus approved projects) conditions. The "design" day used in this study is a typical winter Saturday, which occurs 15 to 20 times a year. The typical winter Saturday represents a conservative approach to traffic planning and mitigation. Typical winter Saturday peak-hour traffic counts previously conducted by the Mammoth Lakes Eagle Lodge Traffic Impact Analysis (LSC Transportation Consultants, Inc., August 2006) were utilized. For intersections where existing traffic counts were not available, this analysis used traffic counts from the General Plan Update Draft EIR Traffic Analysis (LSC Transportation Consultants, Inc., November 2004).

Additional analysis was conducted to further confirm that the typical winter Saturday represents the appropriate environmental analysis day. Using the 2006 Caltrans traffic count data for Main Street east of the Town Post Office, the average peak-hour traffic volumes for Fridays (the highest day of the week) during the peak summer months (July and August) were compared to the average peak hour traffic volumes during peak winter months (January and February). The comparison indicated that the typical winter Saturday was slightly higher than the peak summer Friday.

A cumulative scenario has been included in this analysis to account for traffic from approved development projects (i.e., related projects) that would be added to the existing circulation system. A list of 41 approved projects was supplied by Town staff (refer to Table II-1 in the Environmental Setting section of this Draft EIR). LSA Associates, Inc. determined related projects with more that 10 units have the potential to impact the circulation system. Of the 41 approved projects, 38 have more that 10 units. Accordingly, 38 related projects were used in this analysis.

Peak winter Saturday daily and p.m. (PM) peak-hour trips were generated for the proposed Project using standard trip rates from the Town and the *Institute of Transportation Engineers (ITE), Trip Generation Manual, 7th Edition*. Trip distribution and assignment were determined by the relationship of prominent attractions to the Project.

Study intersection operations were evaluated using level of service (LOS) calculations as discussed below.

LOS Criteria

The operations of intersections, roadway segments, and freeway segments are described with the term "level of service" (LOS). LOS is a qualitative description of traffic flow based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels of service are defined ranging from LOS A (indicating free flow traffic conditions with little or no delay) to LOS F (representing over-saturated conditions where traffic flows exceed design capacity, resulting in long queues and delays). LOS E corresponds to operations "at capacity." When volumes exceed capacity, stop-and-go conditions result and operations are designated as LOS F.

The Town's LOS standard for intersections is LOS D, which corresponds to a volume-to-capacity (V/C) ratio of 0.90 for signalized intersections. An intersection is considered satisfactory when it operates at LOS A-D. An unsignalized intersection would be considered deficient if an individual minor street movement operates at LOS E or F and total minor approach delay exceeds four vehicle hours for a single-lane approach and five vehicle hours for a multilane approach, consistent with the adopted Circulation Element and General Plan Update Draft EIR Traffic Analysis (2004).

A complete description of the meaning of LOS can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual*, which also establishes LOS A–F. Brief descriptions of the six LOS, as abstracted from the Manual, are shown in Table IV.M-1. The LOS criteria for unsignalized and signalized intersections are shown in Table IV.M-2.

For all study area intersections, the *2000 Highway Capacity Manual* (HCM 2000) analysis methodologies were used to determine intersection LOS. All LOS were calculated using the Traffix Version 7.7 software, which uses the HCM 2000 methodologies.

Table IV.M-1
Intersection LOS Descriptions

LOS	Description
A	No approach phase is fully utilized by traffic, and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally, drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced-flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

Source: Transportation Research Board Special Report 209, Highway Capacity Manual

Table IV.M-2
Level of Service Parameters

Level of Service	Signalized Intersections Delay (seconds)	Unsignalized Intersections Delay (seconds)[1]
A	≤ 10.0	≤ 10.0
B	> 10.0 and ≤ 20.0	> 10.0–15.0
C	> 20.0 and ≤ 35.0	> 15.0–25.0
D	> 35.0 and ≤ 55.0	> 25.0–35.0
E	> 55.0 and ≤ 80.0	> 35.0 seconds/vehicle and > 4.0 hour cumulative delay for single lane or > 5.0 hour cumulative delay for two land approach
F	> 80.0	

Source: Transportation Research Board Special Report 209, Highway Capacity Manual
Notes: 1) If the intersection exceeds LOS D criteria, the hourly total criteria (four vehicle-hours for a single-lane and five vehicle-hours for a multilane approach) standard applies.

Signalized Intersections and Unsignalized Intersections

LOS for signalized and unsignalized intersections is determined using the methodology set forth in the 2000 HCM, where the calculation of LOS is dependent on the occurrence of gaps in the through traffic flow of the major street. Using data collected describing the intersection configuration and traffic volumes at the study area intersections; the delay (in seconds per vehicle) of each minor street or major street conflicting movement was estimated. These delays were used to calculate the intersection's average delay per vehicle, which was used to determine the intersection LOS. It should be noted that at two-way, stop-controlled intersections, the intersection delay refers only to the delay experienced by vehicles on the stop-controlled minor street. As a result, at locations where a higher volume of through traffic is experienced on the major street, fewer gaps will be experienced in the through traffic flow of the major street. As a result, the addition of only one or two vehicles to the stop-controlled minor street could result in the rapid deterioration of LOS at that intersection, although most vehicles at the intersection do not experience any delay.

The LOS threshold at unsignalized intersections can be easily exceeded when only a few vehicles experience a delay greater than 50 seconds. Therefore, the Town has identified unsignalized intersection LOS standards that allow greater delay on low-volume approaches. These thresholds are used as delay exceeds the 50-second threshold. Once that threshold is reached, the four vehicle-hour and five vehicle-hour standard applies.

ENVIRONMENTAL SETTING

Existing Traffic Conditions (Winter 2005)

The existing number of lanes and intersection control devices for study area intersections are shown in Figure IV.M-2. Existing typical winter Saturday peak-hour traffic volumes at each study area intersection and average daily traffic (ADT) on the roadways are shown in Figure IV.M-3. Existing levels of service at study area intersections are shown in Table IV.M-3. The LOS worksheets for the existing conditions are presented in Appendix J to this Draft EIR.

Table IV.M-3
Existing (2005) Typical Winter Saturday Intersection LOS

Intersection	Delay (sec)	LOS
1. Minaret Rd./Old Mammoth Rd.*	18.9	C
2. Minaret Rd./Meridian Blvd.	17.1	B
3. Old Mammoth Rd./Meridian Blvd.	20.3	C
4. Old Mammoth Rd./Main St.	17.5	B
5 Minaret Road/Main St.	19.7	B

Source: Traffic Impact Analysis prepared by LSA in December 2006 and revised in July 2007
*Notes: * = unsignalized intersection*

As shown in Table IV.M-3, all study area intersections currently operate at satisfactory levels of service (LOS D or better) in the existing condition.

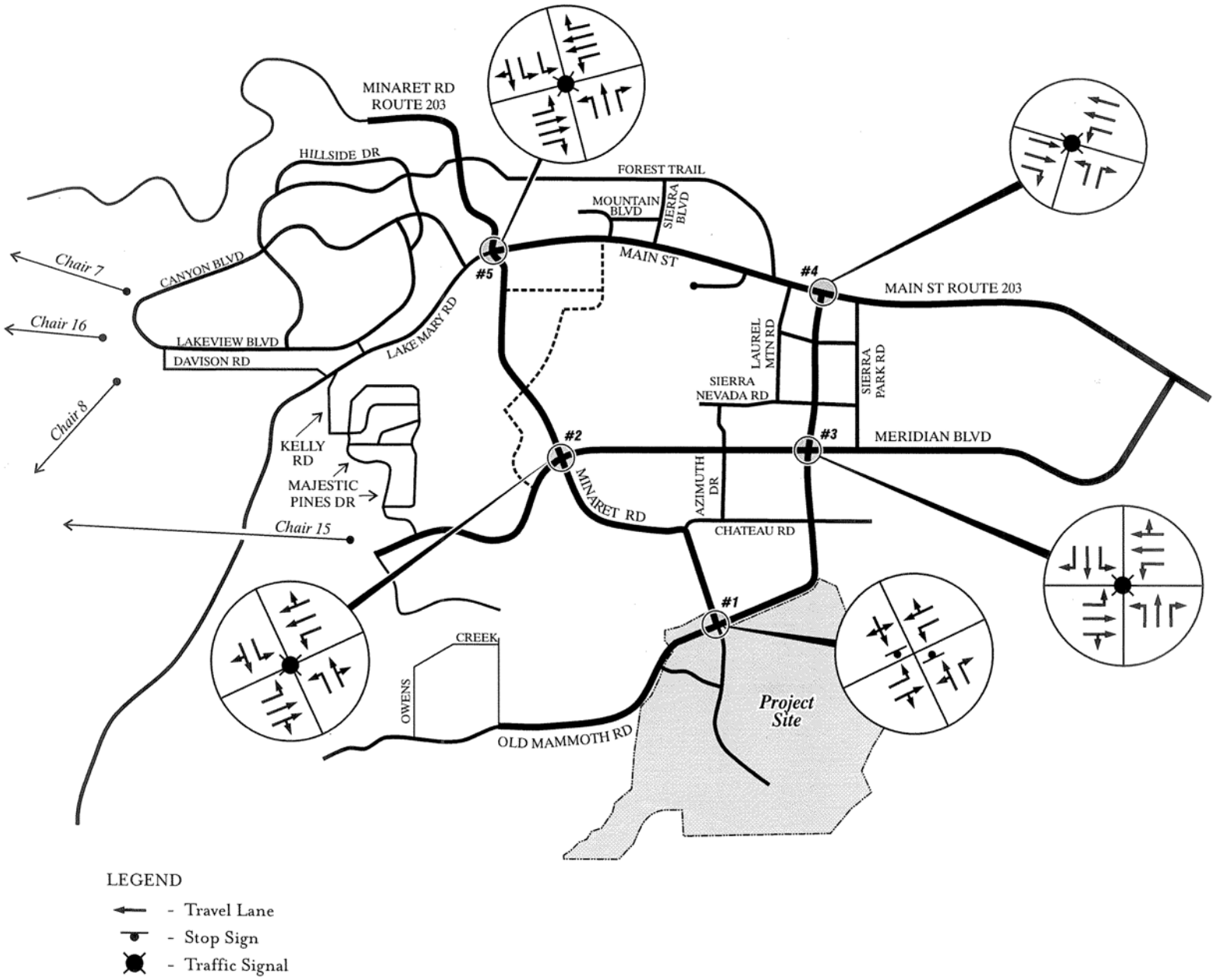
Parking

The Project site is currently undeveloped and there are no parking facilities on the site.

Bicycle and Pedestrian Facilities

The Project site is currently undeveloped with the exception of Fairway Drive, which provides access to Old Mammoth Road for residents of Snowcreek V.

The Project site is currently served for transit by Mammoth Lakes Transit Red Line. The Red Line provides bus stops adjacent to the Project site on the northwest corner of Old Mammoth Road and Minaret Road and provides service to North Village, Snowcreek Athletic Club, and the Main Lodge via Old Mammoth Road, Minaret Road, Chateau Road, Main Street, and Canyon Boulevard. The Red Line day service operates every half hour from 7:00 a.m. to 5:30 p.m. with evening service operating every half hour from 5:00 p.m. to 12:00 a.m.



Source: LSA, 2007.

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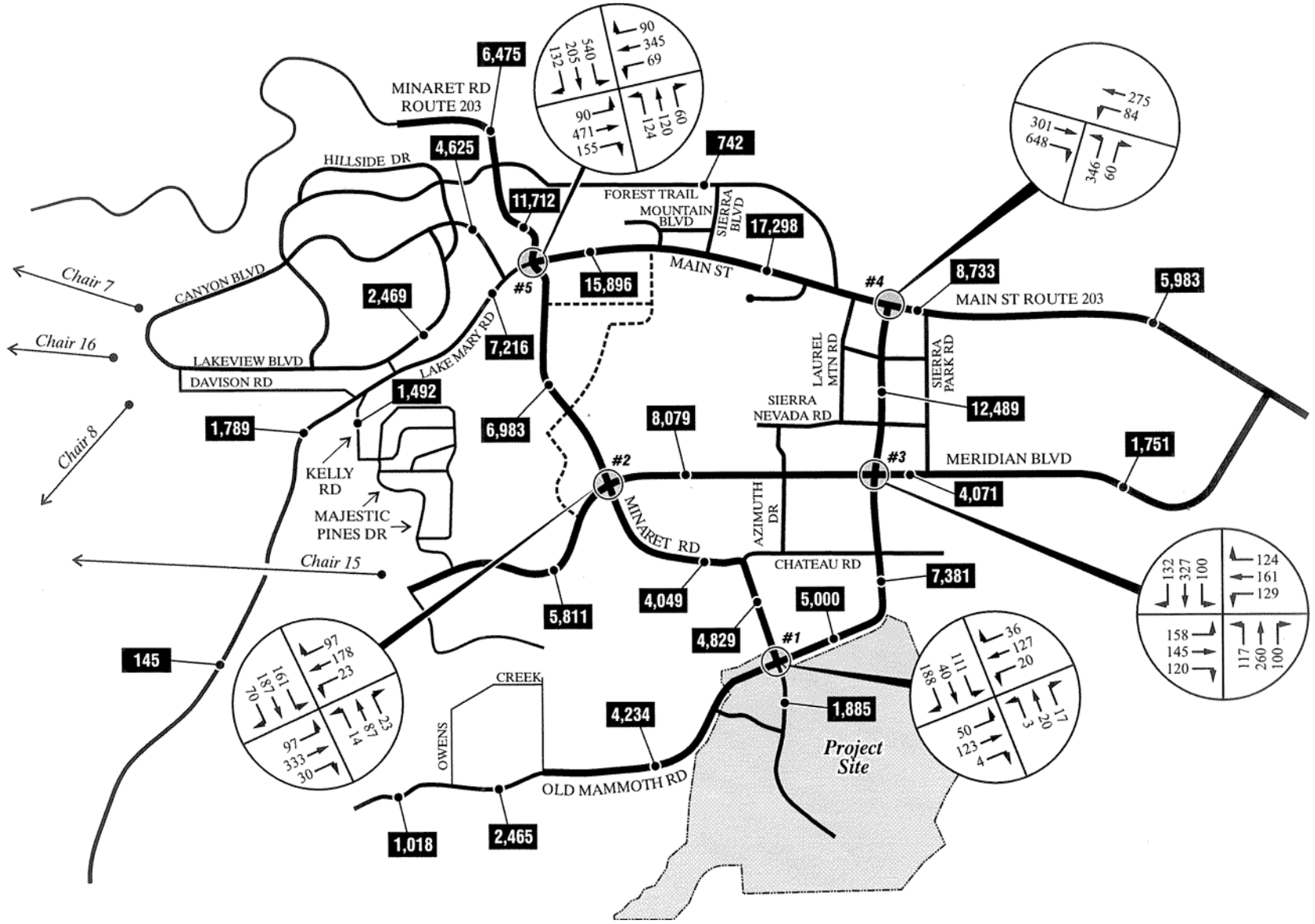
Figure IV.Mv-2
Study Area Intersection Geometrics and Control Devices



Note: Existing volumes taken from the Eagle Lodge Traffic Impact Analysis, (August 31, 2006) and the Mammoth Lakes Transportation Model Validations Report (November 11, 2004) by LSC Transportation Consultants, Inc.

YYYY - Average Daily Traffic (ADT)

Source: LSA, 2007.

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Figure IV.M-3
Existing Condition Typical Winter
Saturday Peak Hour Traffic Volumes

Cumulative (Existing Plus Approved Projects) Conditions

To forecast background traffic conditions, traffic volumes from approved projects in the vicinity of the Project were added to existing traffic volumes. In consultation with the Town and LSA, Associates, Inc., the related projects list (see Table II-1 of the Environmental Setting section of this Draft EIR) was modified slightly for the traffic analysis and is included in Appendix J to this Draft EIR. The modified list includes approved projects with more than 10 units.

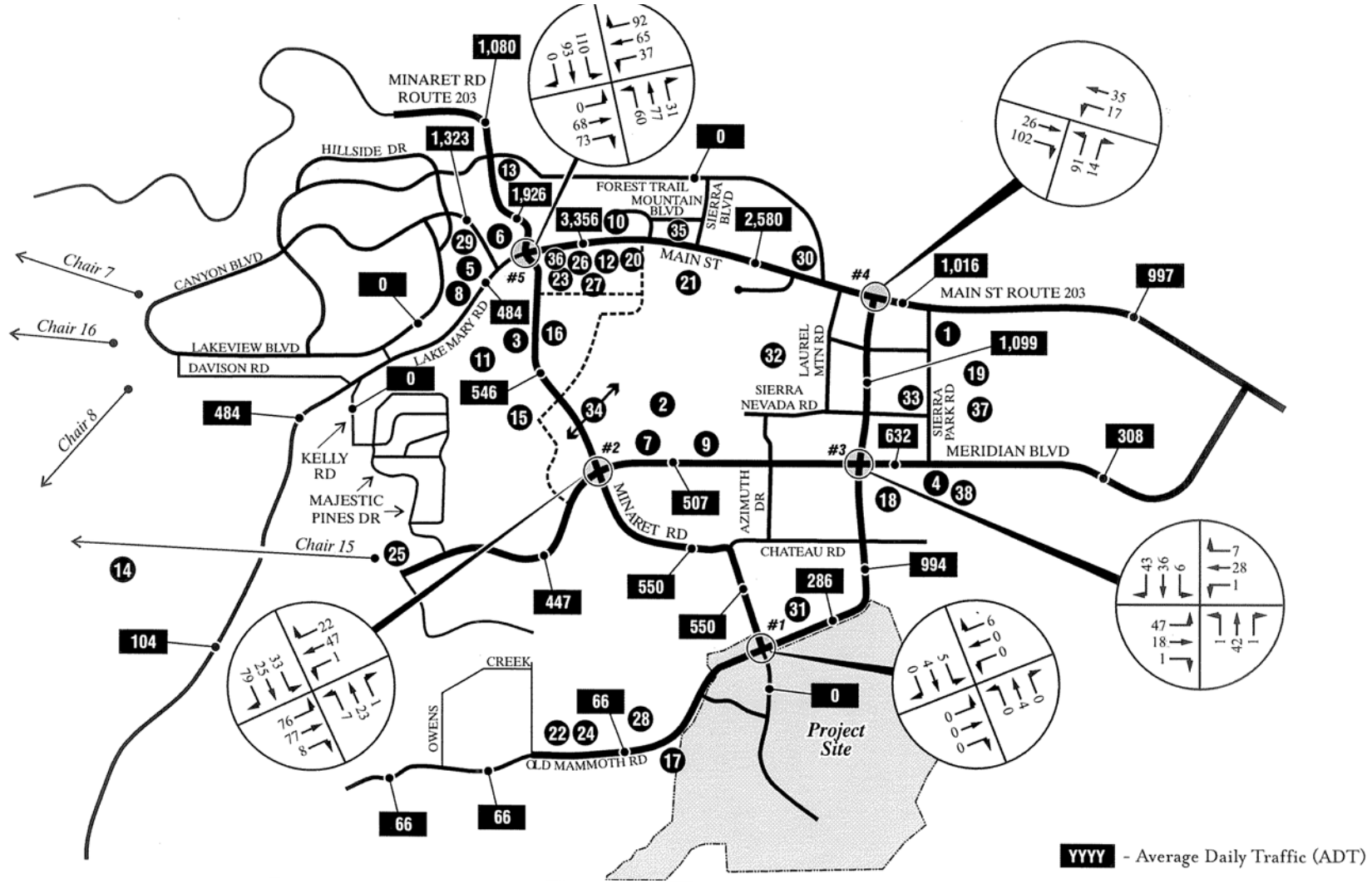
Traffic generated by the reasonably foreseeable projects was added to existing traffic to arrive at the cumulative baseline condition. The location of the approved projects, along with the traffic volumes and ADT contributed to study area intersections and roadway segments by the approved projects are illustrated in Figure IV.M-4. The cumulative baseline traffic volumes and ADT at each intersection and roadway segments are illustrated in Figure IV.M-5. A level of service analysis at study area intersections was prepared for the cumulative baseline condition. The cumulative baseline LOS for those intersections is shown in Table IV.M-4. The LOS worksheets for the cumulative baseline conditions are presented in Appendix J to this Draft EIR.

Table IV.M-4
Cumulative Typical Winter Saturday Intersection Levels of Service

Intersection	Delay (sec)	LOS
1. Minaret Rd./Old Mammoth Road*	22.3	C
2. Minaret Rd./Meridian Blvd.**	30.9	C
3. Old Mammoth Rd./Meridian Blvd.	29.4	C
4. Old Mammoth Rd./Main St.	25.8	C
5. Minaret Rd./Main St.	40.0	D

Source: Traffic Impact Analysis prepared by LSA in December 2006 and revised in July 2007
*Notes: * = unsignalized intersection*
*** =Assumes existing signal, which will be replaced by a roundabout in 2008.*

As shown in Table IV.M-4, study area intersections are forecast to operate at satisfactory LOS (LOS D or better) in the cumulative baseline condition.



YYYY - Average Daily Traffic (ADT)

Approved Projects Key

1. Tavern Road Park and Ride
2. The Jeffries*
3. The Grove
4. Mammoth Lakes Foundation*
5. Monache (Westin)*
6. 80/50 Timeshare Condos*
7. Tallus Timeshare Condos*
8. Mammoth Hillside*
9. Mammoth Lakes Family Housing*
10. Mammoth View*
11. Fairway 4/5 (Woodwinds)*
12. Sierra Star 4b Housing*
13. Intrawest South Hotel*
14. Storied Places*
15. Fairway 16 (Solstice)*
16. Stonegate*
17. Snowcreek VI*
18. Mono County Library*
19. Mammoth Hospital
20. Darrin Davis*
21. Manzanita Apartments
22. Aspen Village Phase I*
23. Mammoth Crossing (Lodestar)*
24. Aspen Village Phase II*
25. Eagle Lodge*
26. 3863/3905 Main Street*
27. 3599 Main Street
28. Snowcreek VII*
29. Town Parking Structure
30. MLFPD
31. Cardinal Investments
32. Shady Rest
33. Clearwater Mammoth
34. Sierra Star Master Plan
35. Grey Eagle
36. Holiday Haus
37. High County Lumber
38. Town Ice Skating Rink

Source: LSA, 2007.

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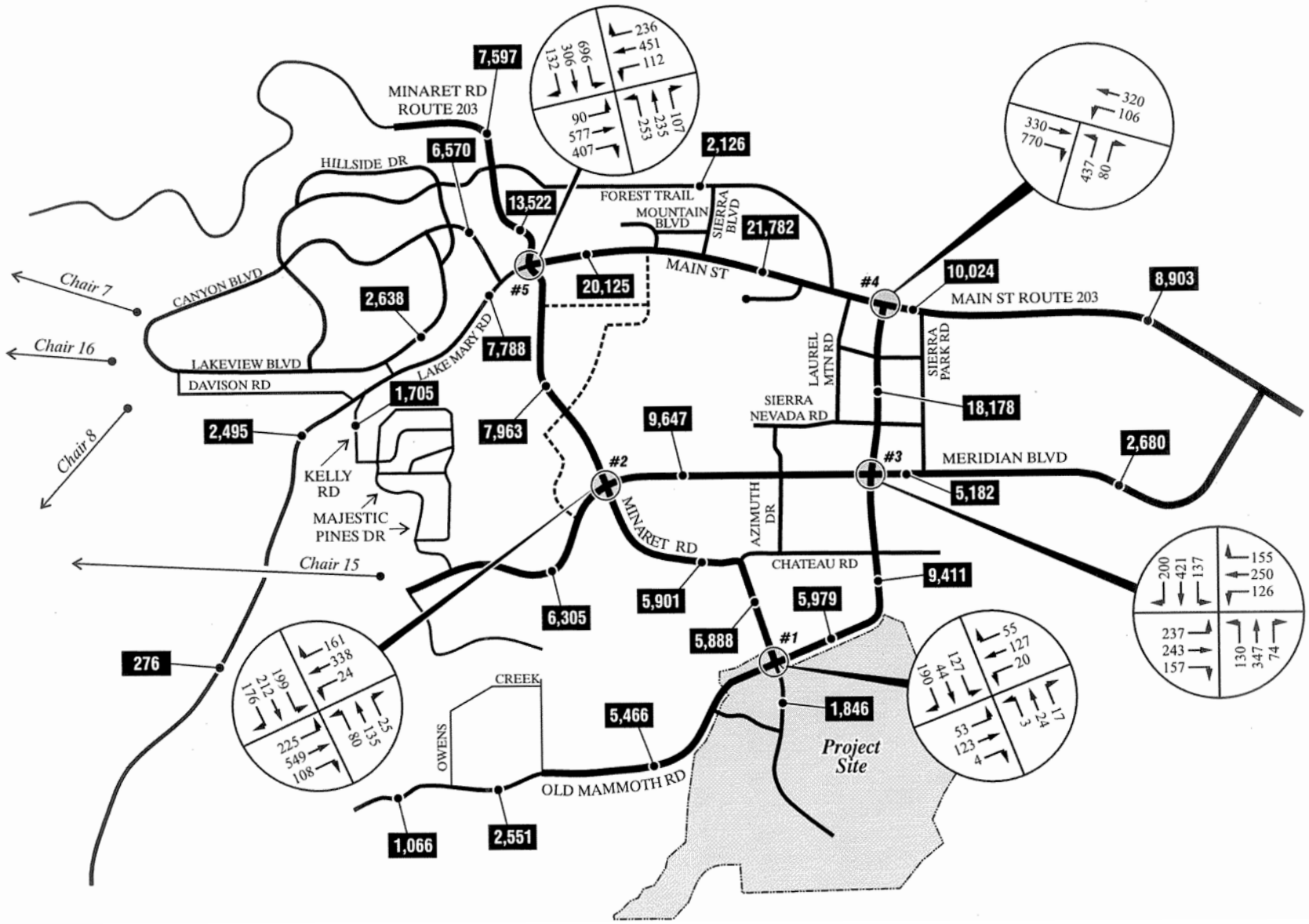
Figure IV.M-4
Approved Project Locations and Trip Assignment



YYYY - Average Daily Traffic (ADT)

Source: LSA, 2007.

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Figure IV.M-5
Cumulative Baseline Typical Winter
Saturday Peak Hour Traffic Volumes

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G of the *CEQA Guidelines*, a project would have a significant transportation/traffic impact if it would:

(a) cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number or vehicle trips, the V/C ratio on roads, or congestion at intersections);

(b) exceed, either individually or cumulatively, a LOS standard established by the Town (or Caltrans for State Highway 203) for designated roads or highways;

(c) result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

(d) substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

(e) result in inadequate emergency access;

(f) result in inadequate parking capacity; or

(g) conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

The closest airport to the Project site is the Mammoth Yosemite Airport, located approximately seven miles to the east of the Project site. The Project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; therefore, this impact will not be analyzed further.

The methodology utilized in this analysis for determining LOS for signalized and unsignalized intersections is described above under "Analysis Methods."

Roadway operations and the relationship between capacity and traffic volumes are generally expressed in terms of LOS. These levels recognize that, while an absolute limit exists regarding the amount of traffic traveling through a given intersection (the absolute capacity), the conditions that motorists experience rapidly deteriorate as traffic approaches the absolute capacity. Under such conditions, congestion is experienced. There is general instability in the traffic flow, which means that relatively small incidents (e.g., momentary engine stalls) can cause considerable fluctuations in speeds and delays. This near-capacity situation is labeled LOS E. Beyond LOS E, capacity has been exceeded, and arriving traffic will

exceed the ability of the intersection to accommodate it. An upstream queue will then form and continue to expand in length until the demand volume again declines.

As mentioned previously, the Town's LOS standard for intersections is LOS D for signalized intersections. An intersection is considered satisfactory when it operates at LOS A-D. An unsignalized intersection would be considered deficient if an individual minor street movement operates at LOS E or F and total minor approach delay exceeds four vehicle hours for a single-lane approach and five vehicle hours for a multilane approach, consistent with the adopted Circulation Element and General Plan Update Draft EIR Traffic Analysis (2004).

Project Analysis Assumptions

Primary access to the Project site would be provided from the intersection of Minaret Road/Old Mammoth Road. The Project would construct a roundabout at the intersection of Minaret Road/Old Mammoth Road consistent with the General Plan. A second Project access functioning primarily as an emergency access would be provided at the intersection west of Minaret Road/Old Mammoth Road. This secondary access is not evaluated technically and only nominal Project traffic was assigned since this access is not as direct as the main access.

Project traffic generated by the residential uses was reduced by 15 percent to account for transit capture based on the committed shuttle provisions noted in the Project description. The Snowcreek VIII shuttle services and Red Line Bus routes have been accounted for in the traffic generation. The Project has committed three specific transit enhancements to and from the site. These enhancements include:

1. A revision to the Red Line bus route that includes a stop at the Hotel entrance on the Project site and a return to the original bus route.

2. An exclusive shuttle service provided for hotel guests to Eagle Lodge and the Village/Gondola area.

3. Another three to four shuttle vans to be paid for by the Snowcreek VIII master homeowners association for all residents to use to major visitor stops including Eagle Lodge, the Village, Main Street and Old Mammoth Road commercial.

Project trips were generated based on the land uses of the Project. Winter Saturday daily and peak-hour trips were generated for the proposed Project using trip rates from the *ITE Trip Generation Manual, 7th Edition* (2003). Trip rates used for this analysis are described further in Appendix J to this Draft EIR.

As shown in Table IV.M-5, the proposed Project generates approximately 11,183 daily trips and 969 peak-hour trips.

Table IV.M-5
Project Trip Generation

Land Use	Size/Units	ADT	In	Out	Total Trips
Trip Rate					
Residential Condominium/Townhouse[1]		5.670	0.254	0.216	0.470
Hotel[2]		9.975	0.463	0.364	0.827
Convenience Market[3]		863.100	38.555	38.555	77.110
Specialty Retail[4]		42.040	2.381	2.381	4.762
Athletic Club[5]		38.460	1.845	1.845	3.690
Ice Skating Rink[6]		39.930	1.150	1.400	2.550
Project Trip Generation					
Residential Condominiums	770 DU	4,366	195	166	362
Condominiums (Employee Housing)	80 DU	454	20	17	38
Hotel	400 DU	3,990	185	146	331
Total Residential Trip Generation		8,810	401	329	730
Transit Capture (15%)		(1,321)	(60)	(49)	(110)
Net Residential Trip Generation		7,488	341	280	621
Market/General Store	3,500 SF	3,021	135	135	270
Interpretive Center[7]	900 SF	388	17	17	35
Outfitters Cabin[8]	1,700 SF	71	4	9	13
Swim Club	8,000 SF	154	7	7	15
Ice Skating Pond		60	3	3	6
Snowcreek VIII Transit Line[9]		-	3	3	6
Red Line Bus Route[10]		-	2	2	4
Total Project Trip Generation		**11,183**	**513**	**457**	**969**

Notes:
ADT = Average Daily Traffic
DU = Dwelling Unit
TSF = Thousand Square Feet
[1] Trip rate referenced from the Institute of Transportation Engineers (ITE), Trip Generation Manual, 7th Edition Land Use Code (230) - Residential Condominium/Townhouse.
[2] Trip rate referenced from the ITE, Trip Generation Manual, 7th Edition Land Use Code (310) - Hotel (per occupied room using a 95 percent occupancy rate).
[3] Trip rate referenced from the ITE, Trip Generation Manual, 7th Edition Land Use Code (851) - Convenience Market (Open 24 Hours).
[4] Trip rate referenced from the ITE, Trip Generation Manual, 7th Edition Land Use Code (814) - Specialty Retail.
[5] 'Trip rate referenced from the ITE, Trip Generation Manual, 7th Edition Land Use Code (493) - Athletic Club. It is expected that approximately half of the trips are generated by skiers already on site.
[6] Trip rate referenced from the ITE, Trip Generation Manual, 7th Edition (2003) Land Use Cede (465) - Multi-Purpose Recreational Facility Saturday trip rate compared to Ice Rink weekday trip rate. It should be noted that as in the Eagle Lodge TIA (LSC Consultants, Inc.), the trip generation is lower because it is expected that approximately that half of the trips are generated by skiers already on site.
[7] Interpretive Center trip rate taken as 50 percent of the market rate.
[8] It should be noted that 5 outbound trips have been added to the standard retail trip generation for the cabin to account for access to the cross country trails.
[9] The Snowcreek VIII shuttle service is estimated to serve the Project site three times during the Saturday peak hour.
[10] The Red Line bus route is expected to serve the Snowcreek VIII Project site every half hour from 5:00 p.m. to 12:00 a.m.

Source: Traffic Impact Analysis prepared by LSA in December 2006 and revised in July 2007.

Project Impacts and Mitigation Measures

Impact TRANS-1 Existing Plus Project Intersection LOS

The Project trips were distributed to the surrounding circulation system based on the location of activity centers in the Town and the location of the proposed Project in relation to the Town's recreational and commercial areas. The trip distribution and Project peak hour trips and ADT at study area intersections and roadway segments are illustrated in Figure IV.M-6. Approximately 15 percent of Project traffic is destined west to the Little Eagle Ski Area and Eagle Lodge via Meridian; 30 percent north to The Village, Canyon Lodge and Main Lodge via Minaret Road; 25 percent to the Downtown areas via Old Mammoth Road and Meridian Boulevard; 10 percent east via Main Street and Meridian Boulevard; 15 percent to Main Street attractions via Minaret Road and Old Mammoth Road; and 5 percent east via Old Mammoth Road.

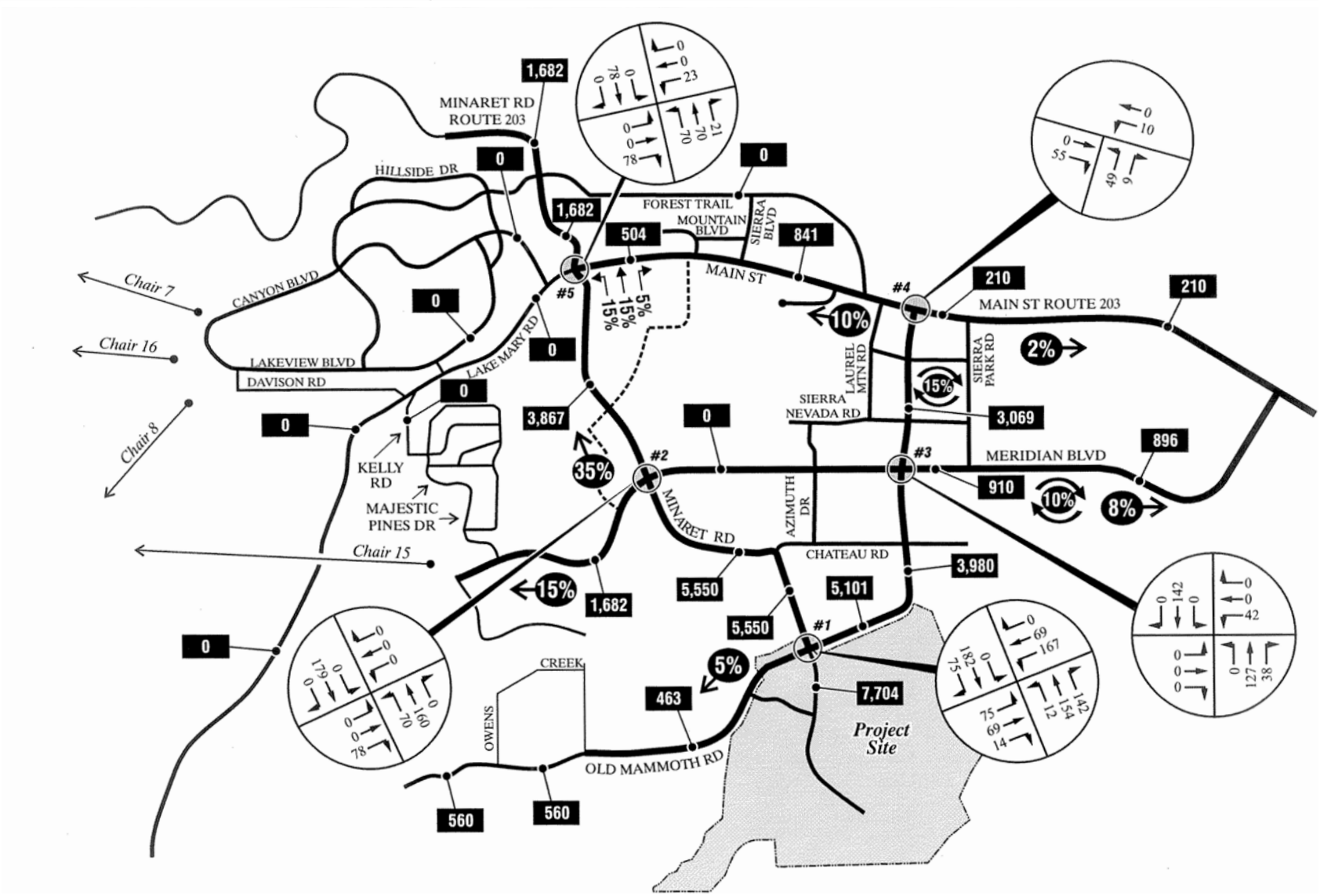
Existing plus Project peak-hour traffic volumes and ADT are illustrated in Figure IV.M-7. Existing plus Project LOS at study area intersections were analyzed and are shown in Table IV.M-6. The LOS worksheets for the existing plus Project conditions are presented in Appendix J to this Draft EIR.

Table IV.M-6
Existing Plus Project Typical Winter Saturday Intersection Levels of Service

Intersection	Cumulative + Project	
	Delay (sec)	LOS
1. Minaret Rd./Old Mammoth Road*	8.4	A
2. Minaret Rd./Meridian Blvd.	28.0	C
3. Old Mammoth Rd./Meridian Blvd.	25.6	C
4. Old Mammoth Rd./Main St.	21.9	C
5. Minaret Rd./Main St.	34.2	C

**Roundabout*
Source: Traffic Impact Analysis prepared by LSA in December 2006 and revised in July 2007.

As shown in Table IV.M-6, all of the study area intersections are forecast to operate at a satisfactory LOS in the existing plus Project condition. With existing conditions, Project-generated impacts on intersection LOS would be ***less than significant*** and no mitigation measures are required.



LEGEND:

20% - Percent Trip Distribution

15 - In This Area

YYYY - Average Daily Traffic (ADT)

Source: LSA, 2007.

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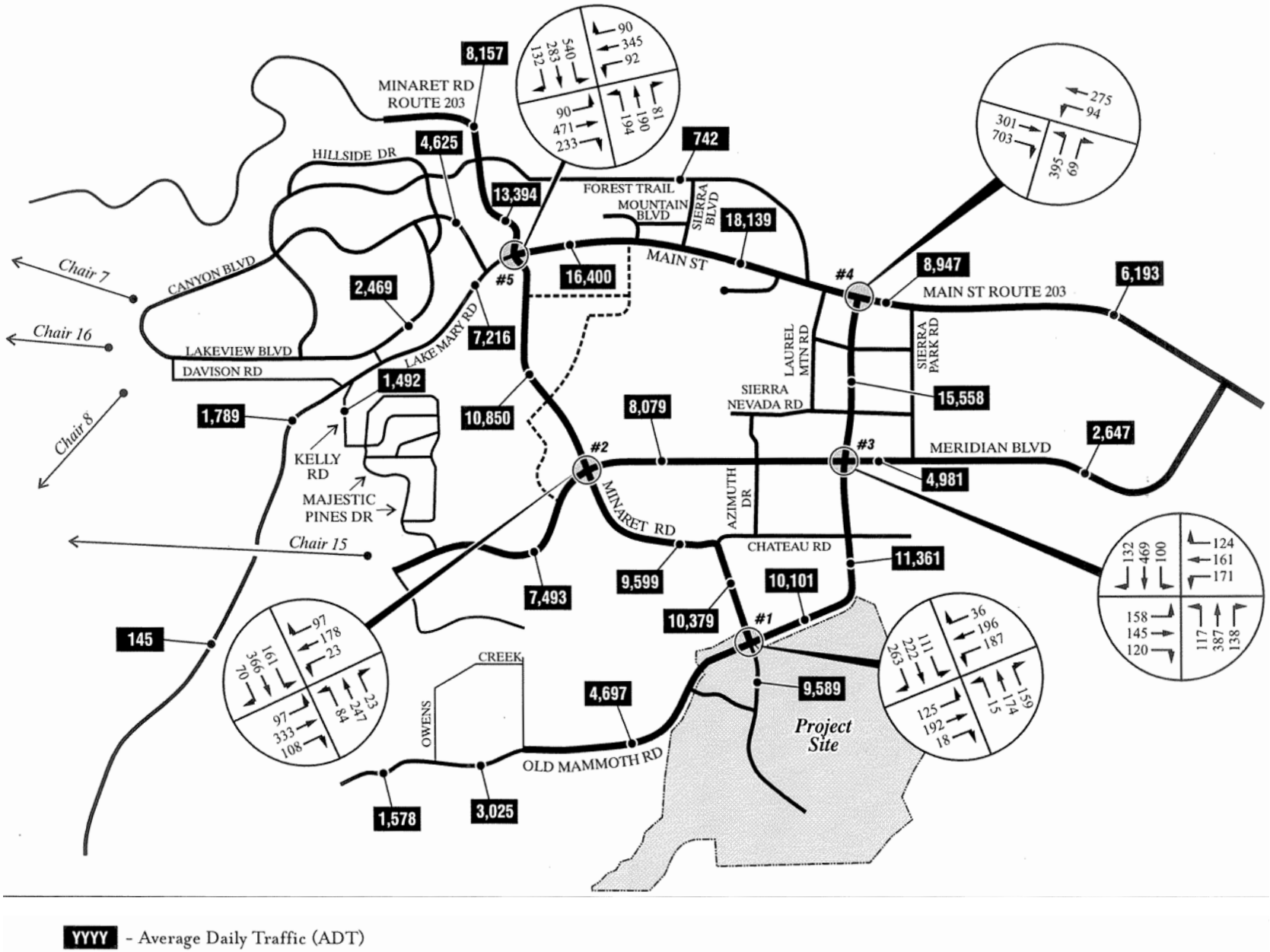
Figure IV.M-6
Snowcreek Project Trip Distribution and Assignment



Source: LSA, 2007.

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Figure IV.M-7
Existing Plus Project Typical Winter
Saturday Peak Hour Traffic Volumes

Impact TRANS-2 Cumulative Plus Project Intersection LOS

The trip distribution and Project trips at study area intersections, previously referenced in Figure IV.M-6, were added to the cumulative baseline condition. Cumulative plus Project traffic volumes are shown in Figure IV.M-8. Cumulative plus Project LOS at study area intersections was analyzed and is shown in Table IV.M-7. The LOS worksheets for the cumulative plus Project conditions are presented in Appendix J to this Draft EIR.

Table IV.M-7
Cumulative Plus Project Typical Winter Saturday Intersection Levels of Service

Intersection	Cumulative + Project		With Mitigation	
	Delay (sec)	LOS	Delay (sec)	LOS
1. Minaret Rd./Old Mammoth Road*	8.9	A		
2. Minaret Rd./Meridian Blvd.	43.2	D		
3. Old Mammoth Rd./Meridian Blvd.	33.9	C		
4. Old Mammoth Rd./Main St.	32.9	C		
5. Minaret Rd./Main St.	58.5	E	38.6	D

**Roundabout*
Shaded = Unsatisfactory LOS
Source: Traffic Impact Analysis prepared by LSA in December 2006 and revised in July 2007

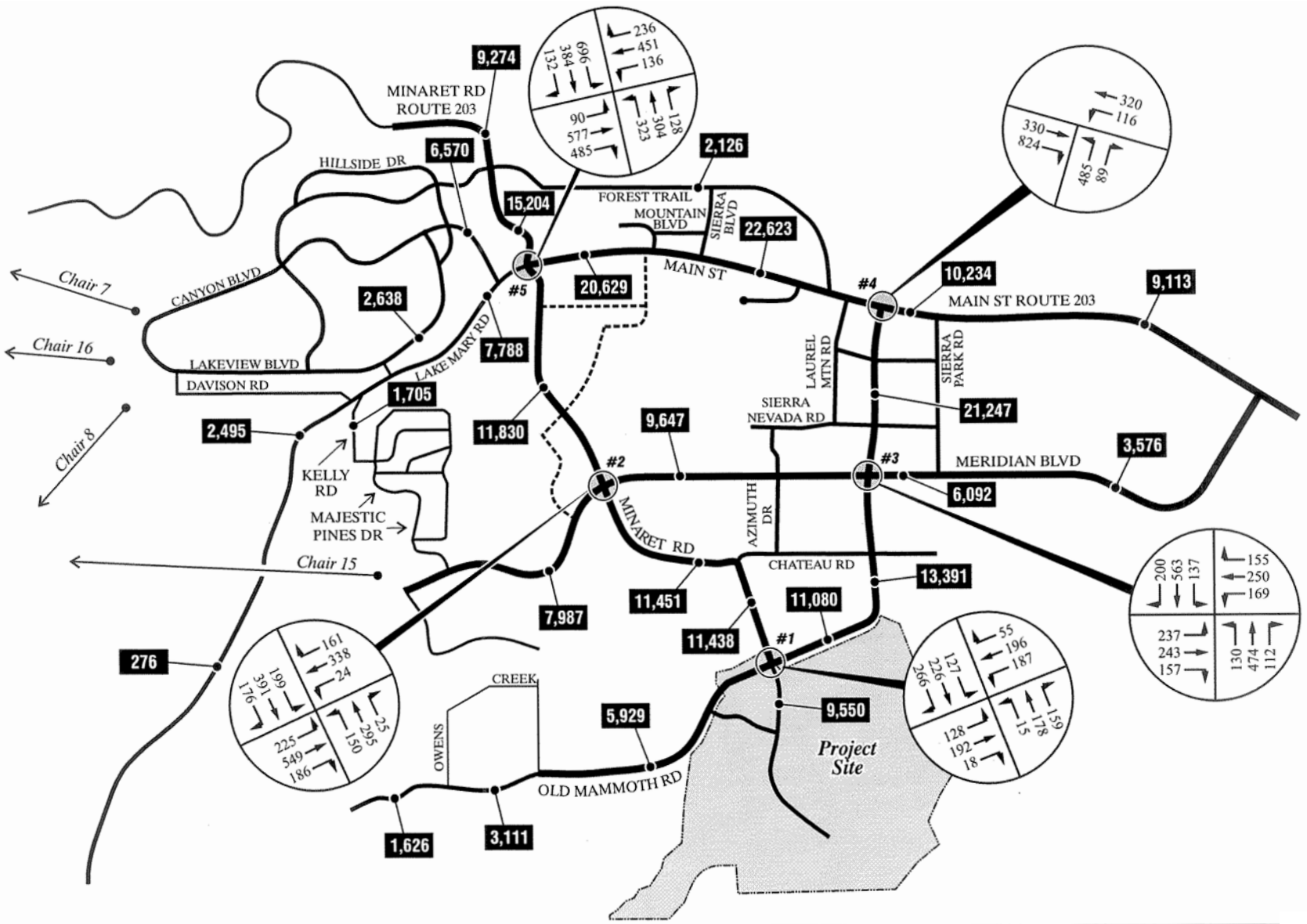
As shown in Table IV.M-7, one of the study area intersections is forecast to operate at an unsatisfactory LOS in the cumulative plus Project condition.

Mitigation Measure TRANS-2 Cumulative Plus Project Intersection LOS

Evaluation of intersection LOS shows that the addition of the Project traffic to the cumulative traffic will significantly impact the Minaret Road/Main Street intersection in the cumulative plus Project scenario, according to the Town's criteria.

The following improvement would be required for the cumulative plus Project condition to mitigate the intersection to LOS D or better:

- **Minaret Road/Main Street.** Provide eastbound right-turn overlap signal phasing consistent with General Plan recommendations. All costs for the implementation of this improvement should be eligible for a credit to Developer Impact Fees (DIF). This mitigation would be implemented as part of a traffic mitigation program that would be funded by the DIF. Implementation of this mitigation measure would reduce this impact to a ***less-than-significant*** level.



Source: LSA, 2007.

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Figure IV.M-8
Cumulative Plus Project Typical Winter
Saturday Peak Hour Traffic Volumes

Impact TRANS-3 Internal Circulation and Access

The existing major public roads that serve the Project site are Old Mammoth Road, Minaret Road and Sherwin Creek Road. Primary access to the Project site would be provided from the Old Mammoth Road/Minaret Road intersection. The addition of a roundabout at this intersection is part of the Project. A second Project access would be located to the west of the intersection of Old Mammoth Road/Minaret Road. This access would function primarily as an emergency access. The need for a westbound left-turn lane from Old Mammoth Road to the secondary access location was evaluated. Based on Exhibit 9-75[1] and using design speed of 45 mph, a westbound left-turn lane is not recommended at the intersection of Minaret Road/Meadow Lane due to nominal westbound left-turn volumes. Fairway Drive currently provides access to Snowcreek V through the Project site. Fairway Drive would continue to provide access to Snowcreek V, but would be realigned as part of the Project. The Market/General Store (Store) and the Natural Resources and Historic Interpretive Center (Interpretive Center) would be accessed from two driveways off of Old Mammoth Road and the Outfitters' Cabin would be accessed from Sherwin Creek Road.

Access to the Project facilities and lodging would be from an internal roadway system. The number of internal intersections at the Project site would be limited. New internal access roads would be created throughout the Project site. All internal circulation would interface at various points with links to external trails accessing public lands to the south (Sherwin Range) or the eastern forest service lands. Internal roadways would be privately owned and maintained. The internal roadway system would provide access to various residential areas and commercial land uses throughout the Project site. Trails and/or emergency access roadways would allow secondary points of access from internal streets and roadways. All side intersecting streets to the main spine road should be stop-controlled, and an all-way stop would be provided at the intersection of the spine road and the road leading to Snowcreek V. Single-lane roundabouts may also be substituted for the stop-controlled and all-way stop intersections. Roadway designs would fit the land and be sensitive to topography, vegetation and views. Safe crossings for pedestrians would be included and crosswalks would be provided to cross Old Mammoth Road at the Minaret Road round-about. Therefore, impacts to internal circulation and access would be ***less than significant*** and no mitigation measures are required.

Impact TRANS-4 Parking

The Project would provide understructure parking facilities for the majority of the development. Surface parking for check in, tour bus, and delivery/service vehicles would also be provided. Parking structures would be designed to provide adequate width and height to accommodate most private vehicles. Short-term surface parking would be provided adjacent to the check-in locations, with guests directed to

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[1] *American Association of State Highway and Transportation Officials, 2004, Exhibit 9-75: Guide for Left-Turn Lanes on Two-Lane Highways of A Policy on Geometric Design of Highways and Streets.*

underground parking structures located under the major residential buildings. Short-term parking uses include passenger drop off and loading, service, deliveries, transit vehicles, and guest parking for residential uses. Some buildings may share check-in and parking access. Affordable residential units would be allowed surface parking for both resident and guest use. Parking for the golf course would be provided through the Hotel parking. Surface parking would also be provided at the Outfitters' Cabin and the Store and Interpretive Center. There are no plans to provide any permanent day skier parking within the Project site.

The Project will be required to provide adequate parking as part of the approval process. Therefore the Project would not result in inadequate parking capacity and impacts would be ***less than significant*** and no mitigation measures are required.

Impact TRANS-5 Bicycle and Pedestrian Facilities

The Town Trail System Master Plan proposes the extension of facilities to promote such non-motorized alternative forms of transportation as walking, bicycling, and cross-country skiing. All aspects of the Project would be connected with a series of paths and walkways to accommodate pedestrians and bicycle use. Links would occur at various points to Old Mammoth Road and its walking and bicycle paths. The pedestrian and bicycle system would include interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and residential areas. Walkways to and from residential areas, as well as trail connections that would tie into the larger Town wide recreational trail network which includes pedestrian trails, bike lanes and sidewalks that are adjacent to major roadways such as Old Mammoth Road, Minaret Road, Sherwin Creek Road, and Fairway Drive. When possible, the major internal pedestrian corridors would be located adjacent to landscape features.

All Project bicycle and pedestrian facilities would ultimately connect with the Town's trail system; thereby providing the Project with a connection to Town-wide facilities. Therefore, impacts would be ***less than significant*** and no mitigation measures are required.

Impact TRANS-6 Transit

The Project would include connections to the Mammoth Lakes Transit Red Line and a shuttle service. The Project would include three specific transit improvements to and from the site. These improvements include:

- A revision to the Red Line bus route that includes a stop at the Hotel entrance on the Project site and a return to the original bus route;

- Exclusive shuttle service for hotel guests to Eagle Lodge and the Village/Gondola area; and

- Additional (three to four) shuttle vans provided by the Snowcreek VIII master homeowners association for use by all residents for trips to major visitor stops including Eagle Lodge, the Village, and Main Street and Old Mammoth Road commercial areas.

Bus/shuttle shelters would be provided at transit stops. These shelters would be sited to facilitate the safety, use and comfort of passengers using transit within the Project area and would be accessible via the local pedestrian trail and walkway network. These improvements would benefit residents of the Project area by providing on-site service and connections to the greater Mammoth Lakes transit system, thereby potentially increasing the use of transit within the Project area and reducing vehicle use. However, it is not anticipated that any increases in transit use would result in demand for the Mammoth Lakes Transit Red Line that cannot be accommodated. Therefore, impacts to transit would be ***less than significant*** and no mitigation measures are required.

Impact TRANS-7 Hazards

New internal access roads would be created throughout the Project site. Access to the Project facilities and lodging would be from an internal roadway system and the number of internal intersections at the Project site would be limited. Trails and/or emergency access roadways would allow secondary points of access from internal streets and roadways. All side intersecting streets to the main spine road would be stop-controlled, and an all-way stop would be provided at the intersection of the spine road and the road leading to Snowcreek V. Roadway designs would fit the land and allow for views of oncoming traffic. Safe crossings for pedestrians would be included and crosswalks would be provided to cross Old Mammoth Road at the Minaret Road round-about.

Fire lanes, turning radii and back up space around buildings would be designed in cooperation with local officials so as to be adequate for emergency and fire equipment vehicles. No agricultural land uses are located in proximity to the Project site. Therefore, the Project would not result in traffic hazards associated with incompatible uses, such as farm equipment. The Project would not substantially increase hazards due to a design feature or incompatible uses and impacts would be ***less than significant*** and no mitigation measures are required.

Impact TRANS-8 Emergency Access

Emergency vehicles would circulate through the Project area using the internal roadway system. In addition, supplemental fire lanes would be developed in conjunction with the roadway system to provide looped secondary emergency vehicle access and egress. Fire lanes, turning radii and back up space around buildings would be designed in cooperation with local officials so as to be adequate for emergency and fire equipment vehicles. Pavements would be designed to support loads created by emergency vehicle traffic. Standpipe and fire suppression systems connections would be incorporated into architectural and landscaping design elements where practical and in location accessible to fire equipment.

The Project would include a secondary Project access at the intersection west of Minaret Road/Old Mammoth Road, which would provide additional access to the site for residents or emergency vehicles. Therefore, the Project would not result in inadequate emergency access and impacts would be ***less than significant*** and no mitigation measures are required.

Impact TRANS-9 Policy Consistency

As noted, the Project will provide for pedestrian and bicycle facilities, and would provide for bus/shuttle shelters sited to facilitate the safety, use and comfort of passengers using transit within the Project area. Therefore the Project would not conflict with adopted policies, plans, or programs supporting alternative transportation and impacts would be ***less than significant*** and no mitigation measures are required.

Impact TRANS-10 Construction

During construction, more vehicle trips would be generated during the grading/excavation phase than during other portions of Project construction activity. Other construction phases (e.g., hauling of equipment and materials) would generate comparatively fewer trips; thus, impacts associated with grading phase traffic would be considered the worst-case situation during Project construction. Grading operation may involve up to 10 haulers conducting 180 loads per day (180 trips in and 180 trips out). These trips would occur on no-snow conditions weekdays, Monday through Friday. The grading operation of 18 trips in and 18 trips out during the weekday peak hour would have no impact on the traffic impact analysis's typical winter Saturday. This volume of truck trips would be equivalent to trips generated by approximately 150 residential units using a passenger-car equivalent of two. Therefore, the Project's construction impacts would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact TRANS-11 Cumulative Impacts

The long-range Town General Plan build out scenario from the Eagle Lodge Traffic Impact Analysis (LSC Consultants, Inc., August 2006) for 2024 plus Project traffic projections and mitigation measures from the Town General Plan Update DEIR Traffic Analysis (LSC Consultants, Inc., November 2004) were used to evaluate long-range impacts. Study area intersection LOS and mitigated LOS for long-range conditions are summarized in Table IV.M-8. The Project would represent a reduction in size by approximately 200 units from that assumed in the Town General Plan Update DEIR Traffic Analysis for the Project site. Therefore, LOS conditions will be improved from those reported in the General Plan analysis and the Project would not contribute to a significant adverse cumulative impact.

As shown in Table IV.M-8, all study intersections would continue to operate at satisfactory LOS (LOS D or better) under long-range conditions. Thus, cumulative impacts would be ***less than significant*** and no mitigation measures are required for the long-range Town build-out conditions.

Table IV.M-8
Long-Range Typical Winter Saturday Intersection Levels of Service

Intersection	Delay (sec)	LOS
1. Minaret Rd./Old Mammoth Road*	21.5	C
2. Minaret Rd./Meridian Blvd.	33.1	C
3. Old Mammoth Rd./Meridian Blvd.	35.1	D
4. Old Mammoth Rd./Main St.	13.8	B
5. Minaret Rd./Main St.	41.0	D
6. US-395 NB Ramps/Main Street	26.6	D
7. US-395 SB Ramps/Main Street	13.5	B

**Roundabout*
Source: Traffic Impact Analysis prepared by LSA in December 2006 and revised in July 2007.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of Mitigation Measure TRANS-1, traffic impacts would be reduced to a ***less-than-significant*** level.

IV. ENVIRONMENTAL IMPACT ANALYSIS
N. UTILITIES

INTRODUCTION

This section addresses the subject of utilities with respect to the Project and includes an examination of the existing services provided to the Project site, future needs, and the potential impacts that the Project would have on those services. The utilities section is subdivided into the following two sections: (1) wastewater and (2) water.

1. WASTEWATER SERVICES

ENVIRONMENTAL SETTING

The Mammoth Community Water District (MCWD) was formed in 1958 to provide water and wastewater services to the Town of Mammoth Lakes (Town). The MCWD boundaries include 3,640 acres of land in the developed portion of the Town. The Town includes approximately 2,500 acres of privately owned land in the developed portion of the 24-square mile incorporated area. The remaining incorporated area is publicly owned and is managed by the Inyo National Forest. A major characteristic of the Town is the seasonality of land use activities. As a result, the MCWD experiences large fluctuations in demand for water and wastewater service. During the seven-month winter ski season, activity is centered in the Town. During the summer months of July, August, and September, outdoor recreation activities shift to areas outside of the Town. The greatest demand for water service occurs during the summer months when irrigation of residential landscaping takes place. October and November represent the lowest period of demand for service from the MCWD. The majority of the water demand on the MCWD's system comes from residential uses.

Wastewater lines within the boundaries of the Town are owned, operated and maintained by MCWD. The MCWD's sewage collection system includes 13 wastewater pump stations and over 52 miles of wastewater mains and interceptors. The MCWD sewer collection system consists of four main wastewater lines ranging in size from six to 18 inches in diameter, located within Old Mammoth Road, Meridian Boulevard, Sierra Star Golf Course to Center Street, and Main Street. The interceptor lines vary in diameter from 18 to 21 inches.[1]

For the collection and transmission system, MCWD engineers performed hydraulic modeling and found negligible amounts of capacity in existing facilities available to serve future demands, when examining the collection system as a whole.[2]

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[1] *MCWD, http://www.mcwd.dst.ca.us/ProjectsReports/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

[2] *MCWD Study to Determine Revised Water and Wastewater Connection Fees September 2006.*

The wastewater generated in the Project area is conveyed to the MCWD Wastewater Treatment Plant (WWTP), located near the intersection of Meridian Boulevard and Main Street (SR 203), through two 18-inch interceptor sewer lines. The WWTP provides advanced secondary treatment, which includes biological treatment, filtration, and disinfection through the utilization of chlorine. The WWTP is designed to provide treatment for peak daily flows of 4.9 million gallons per day (mgd). The current average daily flow is 1.6 mgd with a peak daily flow of 2.6 mgd on holidays and weekends.[3] By the year 2025, MCWD projects that 2.6 mgd of wastewater will be generated and collected on average with peak flows reaching approximately 4.3 mgd. Treated wastewater is currently discharged to Laurel Pond, an effluent dominated water body located approximately 5.5 miles southeast of the Town on United States Forest Service (USFS) land. The MCWD holds a waste discharge permit and has been discharging treated effluent to this pond since 1985. Throughout the years, the pond has become a constructed wetland and a migratory magnet for waterfowl and shorebirds.[4] Disposal occurs at the pond through percolation into the ground and evaporation into the atmosphere. The existing WWTP is designed to accommodate the average and peak amounts of wastewater generated in the community through the year 2025.[5]

Proposed Improvements

MCWD is proposing to upgrade the water treatment process to California Code of Regulations Title 22 (Title 22) tertiary treatment as part of their new Recycled Water Project, which involves improving the existing filtration and disinfection process at the WWTP. Improvements to the WWTP would include secondary effluent pumping, coagulant/polymer addition and mixing, filtration system upgrades, disinfection system upgrades, recycled water in-plant storage, and recycled water pumping equipment. The system will be designed for peak filtration and disinfection flow of 1,600 gallons per minute (gpm), equivalent to 2.3 mgd. At current WWTP flows experienced during the irrigation season, the system is initially expected to produce an average flow of 1.4 mgd of disinfected tertiary effluent suitable for unrestricted irrigation per Title 22.[6]

In addition to improved treatment processes, the Recycled Water Project proposes adding pipelines for distribution of the treated water for irrigation purposes. Distribution facilities will include a recycled water pumping station to be located in the WWTP, adjacent to the storage basin. The pumping station will feed three force mains for conveyance to the Sierra Star Golf Course and the existing nine-hole Snowcreek Golf Course, as well as Shady Rest Park. A below grade concrete receiving tank with level transducer will be provided at each golf course. Receiving tank level will be transmitted to the WWTP pumping station to control pump operation and speed. The receiving tanks will be sized to provide just

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[3] *Hegeman, Ericka, Public Affairs and Environmental Specialist, Mammoth Community Water District, correspondence CAJA staff, February 2, 2007.*

[4] *http://www.fs.fed.us/outdoors/naturewatch/california/Wildlife/laurel-ponds/index.shtml*

[5] *MCWD, http://www.mcwd.dst.ca.us/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

[6] *Bauer Planning & Environmental Services, Inc. Mammoth Community Water District, Recycled Water Distribution Project, Subsequent Final EIR, March 15, 2007.*

sufficient volume to allow adequate pump cycling at the WWTP pumping station. The receiving tanks will be connected to the wet well of existing golf course irrigation pumping stations, currently supplied by well water storage ponds. Isolation valves will be installed in the line connecting the recycled water receiving tank and the on-site irrigation pumping station wet well, and in the line connecting the well water storage pond and the wet well. This will eliminate the need for recycled water open storage in the existing golf course ponds, and will allow well water to be used as backup.[7]

The 2006 Recycled Water Distribution Project EIR identifies the following customers to receive the reclaimed water during summer months: Sierra Star Golf Course, the existing nine-hole Snowcreek Golf Course, and Shady Rest Park. The additional nine-hole expansion to the Snowcreek Golf Course may also receive reclaimed water. The additional nine-hole expansion to the Snowcreek Golf Course may also receive reclaimed water. MCWD certified of the final Recycled Water Project EIR at its March 15, 2007 meeting. The Recycled Water Project is anticipated to be complete by the summer of 2010.

Other planned improvements to the system include upgrading the filter backwash system at Groundwater Treatment Plant #2. The planned upgrade would increase capacity in the sewer lines by about 300 to 350 gpm. This would be achieved by reclaiming the filtered backwash water and could recycle as much as 95 to 99 percent of the backwash that currently goes into the sewer. Although the improvement has not yet been designed, construction may occur as early as the winter 2006/2007 or as late as winter 2007/2008.

REGULATORY SETTING

Regional Water Quality Control Board

The Town is within the jurisdictional boundaries of the Lahontan Regional Water Quality Control Board (RWQCB). The Lahontan RWQCB develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources in its region. In accordance with Section 13263 of the California Water Code, the RWQCBs are authorized to issue Waste Discharge Requirements as well as periodically review self-monitoring reports submitted by the discharger, and perform independent compliance checking, and take enforcement action if necessary. Chapter 4.4 of the Water Quality Control Plan for the Lahontan Region, North and South Basins, outlines policies and regulations for municipal wastewater treatment, disposal, and reclamation. The standards contained within the Water Quality Control Plan are designed to provide applicants with a uniform approach for the design and installation of adequate systems to control wastewater and wastewater treatment/sewage disposal impacts from the Town, and to prevent any potential contamination of groundwater at the discharge site.

[7] *Bauer Planning & Environmental Services, Inc. Mammoth Community Water District, Recycled Water Distribution Project, Subsequent Draft EIR, September 2006.*

Urban Water Management Plan

In accordance with the California Water Code 10610, also known as the Urban Water Management Planning Act (Act) of 1984, the MCWD adopted an Urban Water Management Plan (2005 UWMP) in December 2005. The Act states that the UWMP must be updated every five years to identify short-term and long-term water demand management in order to meet growing water demands during normal, dry and multiple dry years. The 2005 UWMP provides information about MCWD's responsibilities towards water supply and water recycling in the community including wastewater generation, collection, treatment, and disposal.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the *CEQA Guidelines*, the Project could have a significant environmental impact if it would:

(a) exceed treatment requirements of the applicable Regional Water Quality Control Board;

(b) require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or

(c) result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Wastewater Services Issues Not Analyzed Further

As previously stated, the RWQCB enforces waste discharge requirements for the MCWD's service area and WWTP. The Project site is not served by a private on-site wastewater treatment system but instead conveys wastewater via municipal sewage infrastructure maintained by MCWD. The WWTP is a public facility and therefore, is subject to the State's wastewater treatment requirements. Consequently, wastewater from the Project site is, and would continue to be, treated according to the wastewater treatment requirements enforced by the RWQCB.[8] Therefore, the Project would not exceed wastewater treatment requirements, and no further analysis of this issue is required.

[8] *Hegeman, Ericka, Public Affairs and Environmental Specialist, Mammoth Community Water District, correspondence CAJA staff, May 18, 2006.*

Project Impacts and Mitigation Measures

Impact UTIL-1 Wastewater Generation

The Project proposes the development of 850 residential dwelling units, 400 Hotel rooms/suites, (250 Hotel rooms/suites and 150 Private Residence Club [PRC]/suite units) and up to 75,000 square feet for non-residential uses. The 850 residential will be a combination of condominium and townhouse units, with 80 condominium units slated as Workforce Housing.[9] As explained in detail in Section III (Project Description), approval of the 1981 Master Plan allowed for the construction of a total of 2,368 units, with 1,223 units remaining to be constructed (refer to Table III-1 and Figure III-1). The Project proposes to develop a total maximum of 1,050 dwelling units. Since the Snowcreek Master Plan was included both in the Town's General Plan Update Draft EIR and in the 2005 UWMP, MCWD used 1,250 units when calculating the amount of proposed water use for the Water Supply Assessment (Project WSA) for the Project. This is discussed in further detail below in Section IV.N.2 (Water Services) of this EIR. Therefore, the same numbers were used for consistency when analyzing the wastewater flows. Additionally, it should be noted that at the time the Project WSA was prepared, MCWD was not proposing to service the Outfitters' Cabin (1,700 sq ft) located at the far eastern boundary of the Project site, near the base of Sherwin Range. However, it has since been determined that MCWD can provide water services to the Outfitters' Cabin. MCWD determined that the nominal volume of water services needed to service the restroom and ancillary needs for the Outfitters' Cabin is available and would be provided through a separate agreement for MCWD customers located outside of the MCWD service area.[10]

According to the United States Census Bureau's Census 2000 data, the Project is anticipated to generate 2.44 persons per household, which could result in approximately 2,562 new residents. This is a conservative estimate due to the fact that the Project's proposed households would not likely be occupied year round. As such, the amount of wastewater generated at the Project site would increase. Given the fluctuation of the Town's tourism, the majority of the proposed residential units and commercial uses are likely to be occupied seasonally rather than on a year-round basis. Wastewater generation rates are analyzed for average day and peak day flows.

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[9] *Wastewater services for the off-site Workforce Housing will be treated as a separate project because the location for these additional units is currently unknown.*

[10] *Sisson, Gary, General Manager, Mammoth Community Water District, written correspondence CAJA staff, February 2, 2007. This letter is included in Appendix L of this Draft EIR.*

Table IV.N-1
Project Estimated Wastewater Demands

Unit Type	Size	Average Daily Generation Rate[3]	Total Average Gallons Per Day (GPD)	Peak Daily Generation Rate*	Total Peak GPD
RESIDENTIAL	**Dwelling Units (du) / Hotel Rooms**				
Homes (Condominiums)	850 du	110 gpd/unit	93,500	150 gpd/unit	127,500
Hotel Rooms/Suites & Private Residence Club (PRC)/suite units	400[1] rooms	60 gpd/unit	24,000	100 gpd/unit	40,000
NON-RESIDENTIAL	**Square Feet (sf)**				
Old Mammoth Commercial					
Market/General Store	3,500	12.8 gpd/1,000 sf	45	100 gpd/1,000 sf	350
Natural Resources & Historic Interpretive Center	900	50 gpd/1,000 sf	45	100 gpd/1,000 sf	90
Hotel					
Spa/Wellness Center	12,900	435 gpd/1,000 sf	5,612	514 gpd/1,000 sf	6,631
Retail	10,000	150 gpd/1,000 sf	1,500	280 gpd/1,000 sf	2,800
Restaurant/Bar/Lounge	10,000	510 gpd/1,000 sf	5,100	560 gpd/1,000 sf	5,600
Conference/Meeting Space	25,000	70 gpd/1,000 sf	1,750	90 gpd/1,000 sf	2,250
Golf Pro Shop	3,000	60 gpd/1,000 sf	180	100 gpd/1,000 sf	300
Resident's Club	8,000	435 gpd/1,000 sf	3,480	514 gpd/1,000 sf	4,112
Outfitters' Cabin[2]	1,700	n/a	n/a	n/a	n/a
Total Wastewater Demands			**135,212**		**189,663**

[1] *Hotel would accommodate 250 guest rooms/suites (125 dwelling units) and 150 Private Residence Club (PRC) suite units (75 dwelling units); total 400 rooms/suites. Under Town Code a hotel room/suite or private residence room equals ½ of a unit, thus the 400 Hotel rooms/suites equates to 200 dwelling units.*
[2] *The Outfitters' Cabin is outside of the MCWD service area, however, it has since been determined that MCWD can provide water services to the Outfitters' Cabin through a separate agreement.*
[3] *Calculated from 36 months of usage.*
Source: 2006 Revised Snowcreek Master Plan WSA and July 2006 Generation Rates from MCWD.

As mentioned above, wastewater from the Project site would be conveyed via wastewater infrastructure to the WWTP. Currently, the WWTP treats an average daily flow of 1.6 mgd, a peak daily flow of 2.6 mgd, and has capacity to treat 4.9 mgd. This translates into a remaining capacity of 2.3 mgd of wastewater at average daily flows and 3.2 mgd of wastewater at peak daily flows that can be treated at the WWTP.

Based on the methodology described above, as indicated in Table IV.N-1 above, the Project generates average daily flows of 135,212 gpd, or ~0.14 mgd, and peak use at 189,663 gpd, or ~0.19 mgd.

Therefore, the Project's anticipated average daily flow would be approximately 9 percent of the current usage and the peak daily flow would be approximately 7 percent of the current usage.[11] The Project would represent approximately 4 percent of the peak daily flow capacity of the WWTP treatment for peak daily flows up to 4.9 mgd.[12] Thus, Project impacts related to wastewater treatment capacity would be ***less than significant*** and no mitigation measures are required.

Impact UTIL-2 Wastewater Infrastructure

The Project includes installation of wastewater infrastructure within the Project site to convey wastewater generated by the proposed uses to the existing wastewater lines. However, the Project does not have the design plans for this infrastructure complete at this time. Figure IV.N-1 illustrates the existing wastewater infrastructure that serves the Project area. According to MCWD, areas of potential deficiency have been identified in sewer collection lines in the Project area depending on where the Project connects with existing sewer lines. The Project area has an eight-inch PVC sewer line located on the southern extremity of the area proposed for residential development. This section of eight-inch sewer line has enough capacity for about one-half of the estimated demands from the Project.[13] Since the eight-inch sewer line does not have enough capacity for the entire Project, MCWD has stated that connections would need to occur on the ten-inch PVC sewer line to the east of the Project's residential development area. The applicant would be responsible for all costs associated with the installation of wastewater infrastructure on the Project site and the connection fees paid to MCWD for the Project would help to pay for the necessary upgrades to the MCWD's sewer collection pipelines described above. In consideration of the above, Project impacts related to wastewater infrastructure would be ***less than significant*** and no mitigation measures are required.

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[11] *Percentages were calculated using .14/1.6 = .0875 (~9% of average daily flows) and .19/2.6 = .0730 (~7% of peak daily flows).*

[12] *Percentage was calculated using .19/4.9 = .0387 (~4% of maximum WWTP flow capacity).*

[13] *Hegeman, Ericka, Public Affairs and Environmental Specialist, Mammoth Community Water District, correspondence CAJA staff, February 2, 2007.*

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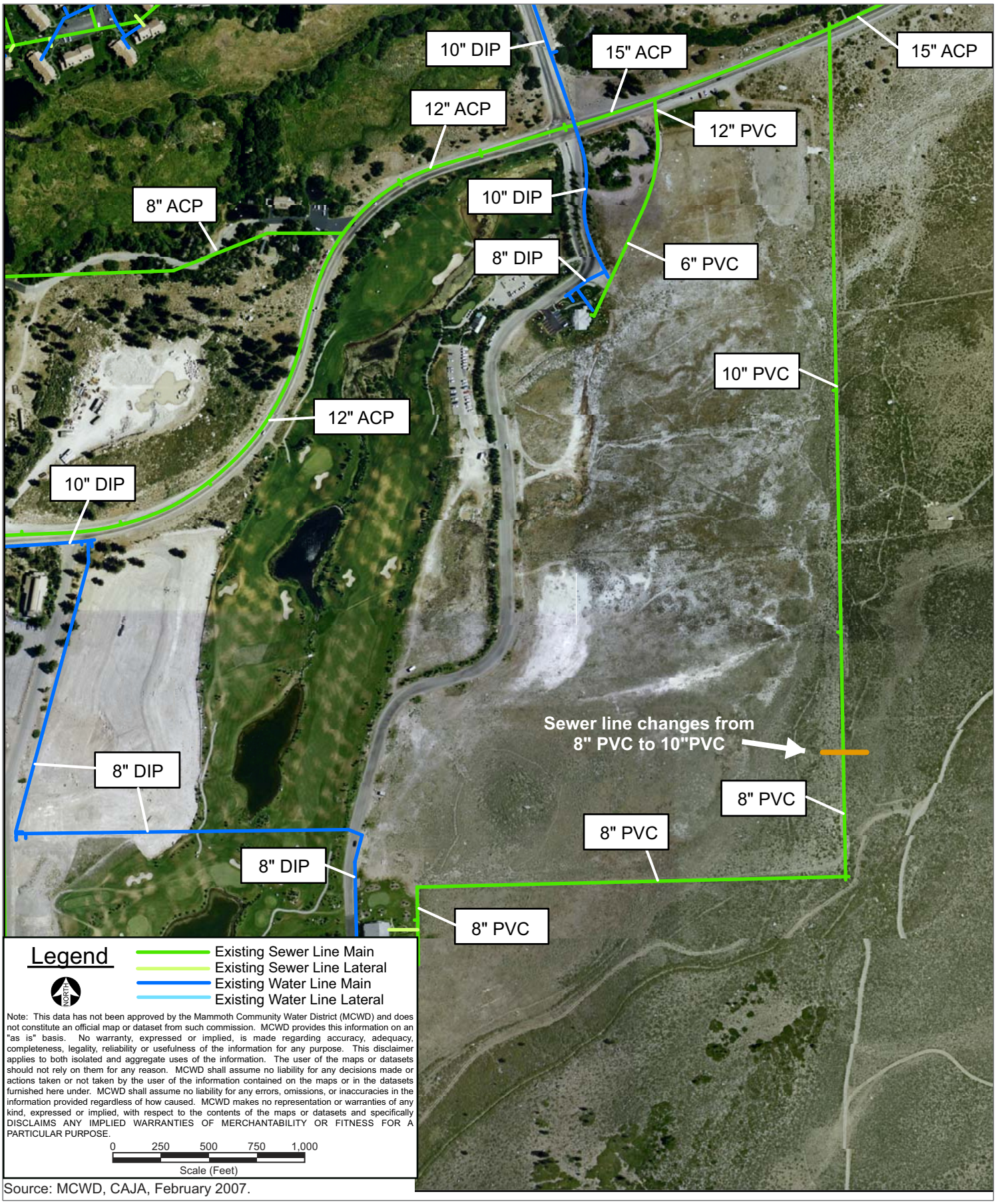

Source: MCWD, CAJA, February 2007.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.N-1
Existing Sewer and Water Lines

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CUMULATIVE IMPACTS

Impact UTIL-3 Cumulative Wastewater Generation

Implementation of the Project in combination with the related projects in Table II-1 (Section II.C Related Projects) would further increase demands on wastewater infrastructure and treatment capacity. As shown in Table IV.N-2, the Project and the related projects would generate wastewater at an average daily rate of approximately 594,351 gpd or ~.59 mgd and a peak flow rate of approximately 808,851 gpd or ~.80 mgd. The potential need for the related projects to require upgrades to the WWTP to accommodate wastewater generated by these projects is site-specific, and there is little, if any, cumulative relationship between the development of the Project and the related projects. In addition, many of the related projects consist of redevelopment that would result in the elimination of existing wastewater generation patterns at these sites. Thus, the total amount of wastewater generation shown in Table IV.N-2 is likely overstated. Nonetheless, as noted above, the MCWD has a remaining capacity of 2.3 mgd of wastewater at average daily flows and 3.2 mgd of wastewater at peak daily flows that can be treated at the WWTP; thus cumulative impacts to the remaining capacity of the WWTP would be ***less than significant*** and no mitigation measures are required.

Table IV.N-2
Estimated Average Day and Peak Day Wastewater Generation for Project and Related Projects

Related Project No.	Land Use	Size (units) (square feet)	Average Daily Generation Rate*	Total Average Gallons Per Day (GPD)	Peak Daily Generation Rate	Total Peak Gallons Per Day (GPD)
1	HDR - R	106 units	170 gpd/unit	18,020	195 gpd/unit	20.670
2	IP – PS	16,000 sf	70 gpd/1,000 sf	1,120	90 gpd/1,000 sf	1,440
3	IP – PS	40,000 sf	150 gpd/1,000 sf	6,000	280 gpd/1,000 sf	11,200
4	HDR – CL	198 units	70 gpd/unit	13,860	90 gpd/unit	17,820
5	HDR – CL	11 units	70 gpd/unit	770	90 gpd/unit	990
6	V – SP	23 units	170 gpd/unit	3,910	195 gpd/unit	4,485
7	SP	42 units	110 gpd/unit	4,620	150 gpd/unit	6,300
8	LDR -1 – SP	14 units	135 gpd/unit	1,890	180 gpd/unit	2,520
9	SP	230 units 4,000 sf	110 gpd/unit 510 gpd/1,000 sf	25,300 2,040	150 gpd/unit 560 gpd/1,000 sf	34,500 2,240
10	HDR – CL	12 units	70 gpd/unit	840	90 gpd/unit	1,080
11	R	58 units	110 gpd/unit	6,380	150 gpd/unit	8,700
12	LDR -1 – R	19 units	110 gpd/unit	2,090	150 gpd/unit	2,850
13	HDR – R	72 units	110 gpd/unit	7,920	150 gpd/unit	10,800
14	HDR – RMF-2	24 units	110 gpd/unit	2,640	150 gpd/unit	3,600
15	HDR – R	45 units	110 gpd/unit	4,950	150 gpd/unit	6,750
16	HDR – R	40 units	110 gpd/unit	4,440	150 gpd/unit	6,000
17	R	28 units	110 gpd/unit	3,080	150 gpd/unit	4,200
18	SP	21 units	110 gpd/unit	2,310	150 gpd/unit	3,150
19	HDR – R	22 units	110 gpd/unit	2,420	150 gpd/unit	3,300
20	HDR – SP	251 units	110 gpd/unit	27,610	150 gpd/unit	37,650
21	SP	193 units	110 gpd/unit	21,230	150 gpd/unit	28,950
22	HDR – R	180 units	110 gpd/unit	19,800	150 gpd/unit	27,000

Table IV.N-2
Estimated Average Day and Peak Day Wastewater Generation for Project and Related Projects

Related Project No.	Land Use	Size (units) (square feet)	Average Daily Generation Rate*	Total Average Gallons Per Day (GPD)	Peak Daily Generation Rate	Total Peak Gallons Per Day (GPD)
		21,000 sf	70 gpd/1,000 sf	1,470	90 gpd/1,000 sf	1,890
23	HDR – R	118 units	170 gpd/unit	20,060	195 gpd/unit	23,010
24	HDR – CL	74 units	110 gpd/unit	8,140	150 gpd/unit	11,100
25	HDR	14 units	110 gpd/unit	1,540	150 gpd/unit	2,100
26	HDR – CG	339 units 28,205 sf	110 gpd/unit 150 gpd/1,000 sf	37,290 4,231	150 gpd/unit 280 gpd/1,000 sf	50,850 7,897
27	C	31 units	170 gpd/unit	5,270	195 gpd/unit	6,045
28	HDR	75 units	170 gpd/unit	12,750	195 gpd/unit	14,625
29	HDR – AH	460 units 31,000 sf	135 gpd/unit 150 gpd/1,000 sf	62,100 4,650	180 gpd/unit 280 gpd/1,000 sf	82,800 8,680
30	R	800 units 29,000 sf com. 30,000 sf confer.	110 gpd/unit 150 gpd/1,000 sf 70 gpd/1,000 sf	88,000 4,350 2,100	150 gpd/unit 280 gpd/1,000 sf 90 gpd/1,000 sf	120,000 8,120 2,700
31	HDR – RMF-1	14 units	170 gpd/unit	2,380	195 gpd/unit	2,730
32	IP	340 parking spaces	n/a	n/a	n/a	n/a
33	RMF-2	120 units	110 gpd/unit	13,200	150 gpd/unit	18,000
34	C	3,600 sf	150 gpd/1,000 sf	540	280 gpd/1,000 sf	1,008
35	R-OS	10,393 sf	n/a	n/a	n/a	n/a
36	HDR - RMF-1	10 units	110 gpd/unit	1,100	150 gpd/unit	1,500
37	I	10 units	110 gpd/unit	1,100	150 gpd/unit	1,500
38	R	3,400 sf	n/a	n/a	n/a	n/a
39	R	10 units	110 gpd/unit	1,100	150 gpd/unit	1,500
40	IP-PS	17,600 sf	150 gpd/1,000 sf	2,640	280 gpd/1,000 sf	4,928
41	RMF-1	10 units	170 gpd/unit	1,700	195 gpd/unit	1,950
			Related Projects Total	**458,911**		**619,128**
			Project Total	**135,440**		**189,723**
			Cumulative Total	**594,351**		**808,851**

Land Use Key:
sf = square feet
LDR-1 = Low-Density Residential 1
LDR-2 = Low-Density Residential 2
HDR-1 = High-Density Residential 1
HDR-2 = High-Density Residential 2
RSF = Residential Single Family
RMF = Residential Multi-Family RR = Rural Residential
C = Commercial
CG = Commercial General
IP = Institutional Public
R = Resort
I = Industrial
NVSP = North Village Specific Plan

Sources:
- *Town of Mammoth Lakes Development Tracking, Jen Daugherty, Assistant Planner, December 2006 and July 2007.*
- *General Plan Update DEIR Land Use Designations, http://www.ci.mammoth-lakes.ca.us, December 2006.*
- *MCWD Wastewater Generation Rates, July 2006.*
- *2006 Revised Snowcreek Master Plan WSA (Snowcreek VIII Project).*

Impact UTIL-3 Cumulative Wastewater Infrastructure

MCWD has identified deficiencies in the collection system that would be exacerbated by the Project and the related projects. The pipeline replacement work is currently scheduled to occur between 2010 and 2013, and MCWD has stated that the work must be done prior to full occupation of the Project area. MCWD developed future demand projections for the General Plan Update Draft EIR that resulted in plans for some infrastructure improvements. A sewer flow model of the entire collection system revealed several areas of inadequacy that will need to be addressed by upgrading existing sewer lines as well as installation of new sewer lines. The potential need for the related projects to require upgraded wastewater lines to accommodate wastewater generated by these projects is site-specific, and there is little, if any, cumulative relationship between the development of the Project and the related projects. In addition, the connection fees paid by individual applicants would help to pay for the necessary upgrades to the sewer collection pipelines described above. In consideration of the above, cumulative impacts related to wastewater infrastructure would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts to wastewater services would be ***less than significant***.

2. WATER SERVICES

ENVIRONMENTAL SETTING

As previously discussed, Mammoth Community Water District (MCWD) provides water and wastewater services to the Town and portions of United States Forest Service (USFS) lands. The MCWD serves the Town with a network of water pipelines that range from 2 to 12 inches in diameter. The amount of water available to the MCWD in any given year is linked to the precipitation (snowfall) received during the season of October through March as measured at Mammoth Pass. In the past thirty years, below average precipitation conditions have been experienced for 50 percent of those years. In 30 percent of the years, seasons with less than 70 percent of average precipitation have been experienced. Surface water availability is directly impacted by the amount of precipitation received in a season whereas impacts to groundwater sources are more gradual over a period of years. The greatest demand for water service occurs during the summer months when irrigation of residential landscaping takes place. October and November represent the lowest period of demand for service from the MCWD. The majority of the water demand on MCWD's system comes from residential uses.

The MCWD has water entitlements from Mammoth Creek for domestic uses, storage rights in Lake Mary, and operates eight groundwater production wells within the MCWD service area. The Town receives domestic water from MCWD from two primary sources: 50 percent from local surface water supplied by snowmelt water diverted from the Mammoth Creek watershed and 50 percent from Mammoth Basin watershed groundwater pumped from wells within the Town's boundaries.[14] The MCWD monitors its surface and groundwater sources to ensure that water supplies are not over-drafted. Surface water levels and flow rates are monitored at 12 locations throughout the Mammoth Basin watershed. Groundwater levels are monitored in the MCWD's eight production wells, as well as 15 shallow and deep monitoring wells. Production from the eight wells varies considerably in response to drought conditions and cycling of customer water demand, but overall trends show increased production over time.[15] The MCWD prepares an annual groundwater monitoring report that evaluates groundwater levels, surface flow and water quality. There is no claim or evidence that the groundwater basin is being over drafted.[16]

Regulatory Setting

Senate Bill (SB) 610 and SB 221

Senate Bill (SB) 610 and SB 221 amended State law in January 2002 to facilitate the exchange of water supply availability information during the planning processes of certain developments. SB 610, which requires water supply assessments (WSA) to be furnished to local governments for inclusion in the

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[14] *Town of Mammoth Lakes, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, March 4, 2006.*

[15] *MCWD Recycled Water Project Final EIR, certified, March 15, 2007.*

[16] *Ibid.*

environmental documentation for certain projects, primarily relates to the California Water Code. SB 221 requires an affirmative written verification of sufficient water supply for the approval of certain projects. The WSA describes the relationship between projected demands on the Town's water supply and the availability of that supply under normal and dry years. The WSA is a comprehensive document, which is prepared to assist the Town Council in making decisions related to land use and is designed to assist in water supply planning efforts.

Section 10912(a) of the California Water Code defines seven types of projects which are subject to the mandates of SB 610, such as: (1) a proposed residential development of more than 500 dwelling units; (2) a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space, (3) a proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space; (4) a proposed hotel or motel, or both, having more than 500 rooms; (5) a proposed industrial, manufacturing or processing plant, or industrial park planned to house more than 650,000 square feet of floor area; (6) a mixed-use project that includes one or more of the projects specified in this subdivision; and (7) a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Urban Water Management Planning Act

As previously discussed, in accordance with the California Water Code 10610, also known as the Urban Water Management Planning Act (Act) of 1984, the MCWD adopted its 2005 UWMP in December. The Act states that the UWMP must be updated every five years to identify short-term and long-term water demand management in order to meet growing water demands during normal, dry and multiple dry years. The 2005 UWMP included the proposed development projected in the General Plan Update DEIR, of which the Project was included under the 1981 Master Plan. This is discussed in more detail under the Project Impacts analysis further below in this section.

Groundwater Management Act

In an effort to monitor groundwater availability and in accordance with Assembly Bill (AB) 3030, the Groundwater Management Act, MCWD adopted a Groundwater Management Plan (2005 GWMP) in July 2005.[17] AB 3030 provides local water agencies with procedures to develop a groundwater management plan so those agencies can manage their groundwater resources efficiently and safely while protecting the quality of supplies. Under AB 3030, the development of a GWMP by a local water agency is voluntary. However, once a plan is adopted, the rules and regulations contained therein must also be adopted to implement the program outlined in the plan. Information and analysis contained within the 2005 GWMP is based on previously published reports, conclusions of recent research and MCWD data compilations on hydrologic conditions, facility locations, and water production for the Mammoth Basin watershed.

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[17] *MCWD, http://www.mcwd.dst.ca.us/ProjectsReports/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

Methodology

Since the Project would provide for the development of more than 500 dwelling units, a WSA is required as per SB 610. The Town formally requested a Water Supply Assessment (WSA) for the Project on December 18, 2006. The MCWD released a WSA (Project WSA) for the Project on January 23, 2007. The information and analysis in this section is based primarily on the Project WSA, as well as the 2005 UWMP, the 2005 GWMP, and other information provided by MCWD. General Plan policies related to water use are addressed in Section IV.I Land Use, in Table IV.H-2 for the 1987 General Plan, and Table IV.H-3 for the 2007 General Plan. With the exception of the Project WSA, which is in Appendix M to this Draft EIR, these documents are incorporated by reference and are all available from the Town of Mammoth Lakes, the Mammoth Community Water District, or via their respective websites.

EXISTING CONDITIONS

Water Supply & Availability

In accordance with the State Urban Water Management Planning Act, MCWD analyzed water supply in the 2005 UWMP by addressing availability of water during normal, single dry and multiple dry water years. Table IV.N-3 provides a breakdown of existing water supplies for surface and groundwater sources. Normal water years are based on a 10 percent deviation from an April 1st average snow pack of 43 inches or 38.7 to 47.3 inches. Normal water years historically have occurred every nine years. The base years for normal water years on which MCWD analyzes its data are: 1946, 1949, 1954, 1971, 1984, 1996 and 1997. According to the *Guidebook to Assist Water Suppliers in the Preparation of a 2005 UWMP,* a single dry year is "generally considered to be the lowest annual runoff for a watershed since the water-year beginning in 1903." The records for the Mammoth Basin begin in 1928 and the lowest April 1st snow water content, which generally equates to the runoff for the watershed occurred in 1977 with about 12 inches. This data was used in the 2005 UWMP to prepare projections for a single dry year where essentially no surface water would be available for MCWD to divert. Groundwater data for single dry water years is determined using the driest years for which the MCWD's production wells were in use: 1992 for wells 1, 6, 10 and 15; 2001 for wells 16, 17, 18, and 20. In addition, MCWD bases multiple dry years on the lowest average runoff for a consecutive, multiple year period (i.e., three years or more) since 1903. The driest multiple year period for the Mammoth watershed was the six years from 1987 to 1992, which averaged 28.7 inches of snow water content at Mammoth Pass.

Table IV.N-3
Existing Water Supply Reliability[1]

Supply	Normal Water Year	Single Dry Water Year	Multiple Dry Years			
			Year 1	Year 2	Year 3	Year 4
Projected Surface Water	2,760[2]	0	1,780	1,500	1,100	1,084
Projected Groundwater Wells	4,000[3]	3,410	3,410	3,408	3,408	3,408
Projected Total Supply	**6,760**	**3,410**	**5,190**	**4,908**	**4,508**	**4,492**

[1] Units of measure are acre-feet (af) per year. An af equals approximately 325,829 gallons.
[2] Total MCWD is "entitled" to. This amount has been used by MCWD.
[3] Total MCWD has a "right" to. This amount has been used by MCWD.

Note: While MCWD currently has surface water rights that total a maximum of 2,760 acre-feet annually, the bypass flow requirements that MCWD operates under have not been permanently established and the final bypass requirements that are eventually established could potentially result in less surface water being available to MCWD. In addition, the volume of groundwater noted in this table is the maximum amount of groundwater that MCWD has projected to pump in any given year and does not necessarily represent the safe yield of the aquifer.

Source: MCWD SB 610 WSA for the 2006 Revised Snowcreek Master Plan (Snowcreek VIII Project).

Surface Water

The MCWD is currently entitled, through two licenses and one permit, to divert 2,760 acre-feet per year (afy) from Lake Mary at a maximum diversion rate of 5 cubic feet per second (cfs) from November 2nd to April 30th and 5.039 cfs from May 1st to November 1st. Surface water is delivered from Lake Mary to the MCWD water system through a 10-inch pipeline along Lake Mary Road. Surface water storage rights are limited to 660 acre-feet (af) annually, of which 606 af may be collected between April 1st and June 30th, and 54 af may be collected between September 1st and September 30th of each year. The MCWD is also limited to a maximum drawdown in Lake Mary of 3.0 feet during the period between June 1st and September 15th, and a total maximum annual drawdown of 5.7 feet. Recent improvements to the Lake Mary surface water treatment plant allow MCWD to utilize the full 2,760 af permitted in normal and wet precipitation conditions. The volume of surface water in normal years is based on the maximum volume of water available through MCWD's surface water rights. However, the volume of surface water in multiple dry years is based on the actual surface water that could have been available in 1992, the last year of a six-year drought.[18]

Since MCWD's diversion facilities are located on USFS land, it has authority over MCWD water operation activities through a Master Operation Agreement (MOA) developed in 1977. The MOA provides terms for instream flow requirements that are designed to protect aquatic species in Mammoth Creek. Additionally, the amount of water that MCWD may store or divert is influenced by the bypass

[18] *MCWD, http://www.mcwd.dst.ca.us/ProjectsReports/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

flow requirements in Mammoth Creek that are included as part of MCWD's water rights. MCWD measures Mammoth Creek flows at its Old Mammoth Road gage located near Mammoth Creek Park. MCWD is only allowed to directly divert natural flows entering Lake Mary and divert natural flows to storage when the flows, as measured at the Old Mammoth Road gage, exceed the bypass flow requirements. When the flows at MCWD's Old Mammoth Road gage are equal to or less than the bypass flow requirements, no water may be directly diverted or diverted to storage, and MCWD must bypass all incoming flows to Lake Mary.

MCWD is second to the City of Los Angeles Department of Water and Power (LADWP) for being the largest diverter of Mammoth Creek water. LADWP exercises its rights to divert 440 afy upstream of U.S. Highway 395, and 4,400 afy downstream of U.S. Highway 395 in the Chance Meadows area, to be used for grazing purposes. However LADWP's water rights are older and do not include instream flow requirements.[19]

While MCWD must currently operate under the bypass flow requirements, there is potential for these requirements to become modified. MCWD is currently preparing an EIR that evaluates the environmental effects of the proposed bypass flow requirements for Mammoth Creek. The outcome of the Mammoth Creek EIR and the resulting decision by the State Water Resources Control Board could modify the existing temporary bypass flows to a different regime that could result in less surface water being available to MCWD. Surface water supply volumes used in the preparation of the Project WSA assumed that the existing bypass flow requirements will remain as they are currently established. Potential reductions in surface water supplies in the future are a possibility, but the amount of these reductions is currently unknown.[20]

Groundwater

The 2005 GWMP describes a monitoring and operation plan for the long-term use of local groundwater and surface water resources. The intent of the 2005 GWMP is to ensure that groundwater resources are managed in a manner that ensures sufficient, high quality groundwater resources while minimizing potential environmental impacts. The MCWD pumps groundwater from the Mammoth Basin watershed, which is located within the Long Valley Groundwater Basin identified by the California Department of Water Resources (DWR) as part of the South Lahontan Hydrologic Region. Mammoth Basin is the watershed of Mammoth Creek and is bounded on the south by the drainage divide of Convict Creek; on the west by the Mammoth Crest; on the north by the drainage divide of Dry Creek; and on the east extending along the watershed of Hot Creek. The area of the Mammoth Basin is about 71 square miles and extends approximately 13 miles west to east and nine miles north to south.

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[19] *CH2M Hill, 2000 Draft EIR for the Proposed Changes for Mammoth Creek Instream Flow Requirements, Point of Measurement, and Place of Use.*

[20] *MCWD SB 610 WSA for the 2006 Revised Snowcreek Master Plan (Snowcreek VIII Project).*

The Mammoth Basin has not been adjudicated or identified by DWR as being overdrafted. Groundwater is pumped from eight production wells located within the MCWD's service area. According to the 2005 GWMP, groundwater may not be extracted at a rate greater than 4,000 afy.[21] During the past five year period (2002 to 2006), MCWD pumped 10,327 af of groundwater, averaging 2,065 afy. As shown in Table IV.N-4, the maximum volume pumped occurred in 2002 and amounted to 2,719 af. When precipitation is lower than normal the use of groundwater is increased, as less surface water supply is available. Production volumes of groundwater in any one year are dependent on the type of precipitation year experienced and consequent availability of surface water. During dry-year periods, groundwater levels within the Mammoth Basin decrease due to increased pumping and less recharge. During normal and above-normal precipitation years, groundwater levels increase and tend to fully recover after two years of normal precipitation.

Table IV.N-4
Annual Volumes[(1)] of Groundwater Pumped

Well No.	2002	2003	2004	2005	2006
1	132	184	71	188	297
6	184	454	347	554	1
10	1086	602	500	577	135
15	592	807	381	244	390
16	141	107	239	55	0
17	310	172	138	100	229
18	77	114	58	226	1
20	196	80	187	167	13
Total Acre-Feet	**2,719**	**2,520**	**1,921**	**2,111**	**1,066**

(1) Units of measure are acre-feet per year. An acre-foot equals approximately 325,821 gallons.
Note: Groundwater pumpage reflects the metered amount of water pumped from individual wells, which tends to vary slightly from the flow measured through the treatment plants.
Source: MCWD SB 610 WSA for the 2006 Revised Snowcreek Master Plan (Snowcreek VIII Project).

Snowcreek Master Plan Water Rights

The Snowcreek Golf Course has reserved water rights, as do the development parcels, as summarized below. These reservations and grants are found in the Arcalarius/MCWD Settlement Agreement of May 1977, the MCWD/Dempsey Agreement of August 1983, the MCWD/Dempsey Agency Agreement of August 1983, and the grant deed from the United States to Dempsey for the new nine-hole parcel.

The new nine-hole golf course parcel acquired in the 2005 Land Exchange with the USFS retains all the surface and groundwater rights that run with the conveyance of the land. There has been no conveyance of these water rights to MCWD.

The existing nine-hole golf course parcel has an expressly reserved groundwater right for a well, not to be located within 2,000 feet of an MCWD well, for production up to 450 gallons per minute. This right

[21] *4,000 afy is the maximum amount of groundwater projected to pump in any given year and does not necessarily represent the safe yield of the aquifer.*

exists for the purpose of maintaining the aesthetic and open space appearance (which had the golf course use in mind at the time this use was described).

Snowcreek predecessor owners expressly conveyed in trust, and appointed MCWD as exclusive agent, all riparian and overlying rights of the Property (all of the original Snowcreek Master Plan property annexed into the Town), solely for the use and benefit of the Property and successor owners of the Property.

Snowcreek predecessor owners conveyed outright to MCWD all other water rights held.

Fire Flow

In addition to supplying water for domestic uses, MCWD also supplies water for fire protection services, in accordance with Mammoth Lakes Fire Protection District (MLFPD) requirements, also discussed in Section IV.I. 1.(Public Services). Fire flow requirements are closely related to land use as the quantity of water necessary for fire protection varies with the type of development, life hazard, type and level of occupancy, and degree of fire hazard (based on such factors as building age or type of construction). The MLFPD-established fire flow requirements vary from 1,500 gpm in low density residential areas and 2,000 gpm high density residential to 2,500 gpm in commercial areas for two hours. Additionally, for high-rise construction, MLFPD requires a pressure of 100 pounds per square inch (PSI) at the roof. In any instance, a minimum residual water pressure of 20 PSI is to remain in the water system while the required gpm is flowing. According to MCWD, the system pressures in the Project area range from 100 to 110 PSI, meeting their goal of 50 to 150 PSI for fire protection purposes.[22]

Local Water Infrastructure

The MCWD serves the Town with a network of water pipelines that range from 2 to 12 inches in diameter. The water pipelines are constructed of either steel, ductile iron pipe (DIP), or polyvinyl chloride (PVC). The existing water pipelines in the area are 8" and 10" DIP. Figure IV.N-1, previously shown, represents the existing water lines for the Project area.

Water Treatment

In 2004, MCWD completed modifications to the Lake Mary surface water treatment plant to meet new standards of the California Department of Health Services. As a result of these modifications, the production capacity of the plant is now rated at the 5 cfs diversion rate allowed in the water rights permit. These improvements have enabled MCWD to utilize the full 2,760 af of water available from its state water right permits in normal and wet precipitation conditions.[23]

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[22] *Email correspondence Ericka Hegeman, MCWD on February 6, 2007.*

[23] *MCWD, http://www.mcwd.dst.ca.us/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

Projected Water Demand

The majority of the water demand on MCWD's system comes from residential uses; with 30 percent from condominiums, 18 percent single family units, and 4 percent multifamily units.[24] The total water demand in 2005 amounted to 3,423 af. This value includes golf course irrigation, system use, and unaccounted for water. Table IV.N-5 shows the past, current, and projected future water demands.

Table IV.N-5
Past, Current, and Projected Water Use[(1)]

Water Use Sector	2000	2005	2010	2015	2020	2025
Single Family Residential	515	549	586	623	659	696
Condominium	961	948	960	973	985	997
Multi-Family Residential	144	140	211	282	353	424
Commercial/Industrial and Public	217	257	374	469	565	660
Motel / Hotel	112	111	304	496	689	881
Public Sector	170	296	n/a[(4)]	n/a[(4)]	n/a[(4)]	n/a[(4)]
Golf Course[(2)]	297	263	400	400	400	400
Other[(3)]	53	107	80	80	80	80
Unaccounted	486	752	760	760	760	760
Total	**2,955**	**3,423**	**3,674**	**4,082**	**4,490**	**4,898**

[(1)] Units of measure are acre-feet (af) per year. An af equals approximately 325,821 gallons.
[(2)] Golf course water use is based on existing demand from Sierra Star and Snowcreek golf courses.
[(3)] Other = treatment plant process water, fire fighting, line cleaning, etc.
[(4)] Public Sector is included in commercial for future projections for consistency with the Town's General Plan Update Draft EIR (2005).
Note: Existing hotel/motel water-use includes those units that are separately metered and does not include units that share water meters with commercial. Commercial includes mixed uses such as restaurants, condo/hotel, retail, etc. Groundwater data in this table is based upon metered flows from the MCWD's groundwater treatment plants, which varies slightly from amounts measured from individual wells.
Source: 2005 Urban Water Management Plan

When projected future water demand estimates are compared with current supply data, it is projected that water supply deficiencies would occur after a single dry year and in multiple year drought conditions. Table IV.N-6 compares current supply and future demands in normal, single dry and multiple dry years, without the Project. Table IV.N.6 illustrates that shortfalls in supply would occur if MCWD were to continue to utilize existing water supplies to meet demands at build-out of the community without the Project. Deficiencies of over 1,000 af would occur in a single dry year without the Project.

[24] *MCWD, http://www.mcwd.dst.ca.us/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

Table IV.N-6
Current Supply and Demand Without Project[(1)]

Current Supply			Multiple Dry Water Years			
	Average Normal Water Year	Single Dry Water Year	Year 1	Year 2	Year 3	Year 4
Supply Total	6,760	3,410	5,190	4,908	4,508	4,492
Demand Total (without Project)	4,669	4,669	4,669	4,669	4,669	4,669
Difference (without Project)	**2,091**	**-1,259**	**521**	**239**	**-161**	**-177**

(1) Units of measure are acre-feet (af) per year. An af equals approximately 325,8219 gallons.
Source: MCWD SB 610 WSA for the 2006 Revised Snowcreek Master Plan (Snowcreek VIII Project).

Additional Sources of Water

California Water Code 10911 requires that if, as a result of its assessment, the public water system concludes that its water supplies are, or will be, insufficient, the public water system shall provide to the city or county its plans for acquiring additional water supplies. Since existing supplies are insufficient and result in a shortfall in single dry years, MCWD has developed the following plans regarding implementation of water conservation measures, use of recycled water, and development of new supplies.

Future Groundwater

MCWD has identified groundwater as being a significant source of future water supplies for the community. Groundwater would be extracted from either the Mammoth Basin watershed or the Dry Creek Basin watershed to the north of the Mammoth Basin. Additional groundwater production wells in the Mammoth Basin would require environmental review and hydrogeologic analysis to ensure that additional volumes of water can be safely extracted. Well development in the Dry Creek Basin would also require environmental review and hydrogeologic analysis prior to utilizing this water source. Overall, depending upon supplies needed, about 1,000 af of additional groundwater supplies may be developed in the future from either the Mammoth Basin watershed or the Dry Creek watershed. Volumes of groundwater projected to be available from the Dry Creek watershed are estimated at 1,500 afy during normal years and 1,245 afy during multiple dry year periods.[25]

As shown in the Project WSA, although groundwater supplies are supplemented with surface water and MCWD may be supplementing existing well supplies with additional production wells in the future, the volume of groundwater currently available from existing wells is insufficient to meet the total demand under multiple dry-year conditions as the community nears build-out in 2025. A study conducted for

[25] *MCWD SB 610 WSA for the 2006 Revised Snowcreek Master Plan (Snowcreek VIII Project), page 22.*

MCWD indicated that a total volume of 3,800 afy could be pumped from the Mammoth Basin during a three-year dry period.[26]

Future Recycled Water

MCWD currently supplies untreated groundwater for irrigation of the existing nine-hole Snowcreek Golf Course and the Sierra Star Golf Course, and supplies potable water to Shady Rest Park. MCWD has supplied untreated groundwater for irrigation of the existing nine-hole Snowcreek Golf Course over the past seven years, averaging about 85 afy.

As described briefly in the Wastewater Section, MCWD has identified the use of recycled water as a potential source of water supply for golf course and park irrigation. The source of supply would come from the wastewater treatment plant (WWTP). Although the WWTP currently produces recycled water, there are some upgrades necessary to meet current State Department of Health standards. Parallel recycled water pipelines would be installed from the WWTP to the Sierra Star Golf Course and the existing nine-hole Snowcreek Golf Course and possibly the expanded additional nine-holes for the Snowcreek Golf Course. A third pipeline would be installed from the WWTP to Shady Rest Park. MCWD certified the final Recycled Water Project EIR at its March 15, 2007 meeting. The Recycled Water Project is anticipated to be complete by the summer of 2010. The Recycled Water Project would provide the capability to produce 1.55 mgd of recycled water per year.

Since golf course irrigation consists of approximately 12 percent of water use currently; along with nine percent used for parks and public facility irrigation[27]; the availability of recycled water to be used instead of potable water would substantially help the Town meet existing and future water supply needs. In addition, potable water supplied to Shady Rest Park over the past four years averaged about 30 afy. Overall, it is anticipated that the amount of potable water that could be made available through the implementation of the Recycled Water Project is approximately 400 afy. However, depending upon customer demands, the Recycled Water Project could potentially supply approximately 550 afy to large turf irrigators in the community during the summer irrigation season.[28]

Future Conservation

In 1992, MCWD implemented water restrictions that included limiting landscape irrigation to three days per week. This restriction resulted in an average reduction in water demand of 25 percent for the irrigation period of June through September. Projections of available water supply are prepared each year after final snowpack measurements are made on April 1st. At that time, if projections indicate possible water supply insufficiencies, MCWD's Board of Directors may declare the existence or threatened

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[26] *"Investigation of Groundwater Production Impacts on Surface Water Discharge and Spring Flow", Wildermuth Environmental, Inc. November 2003.*

[27] *MCWD, http://www.mcwd.dst.ca.us/ProjectsReports/UWMP/UWMP2005.pdf, CAJA staff, February 5, 2007*

[28] *MCWD SB 610 WSA for the 2006 Revised Snowcreek Master Plan (Snowcreek VIII Project).*

existence of a drought and may then implement any level of restrictions as deemed necessary. At build-out of the community under the General Plan Update Draft EIR, the projected savings from implementation of water conservation measures amounts to about 500 afy.

Future Water System Loss Reduction

MCWD has been implementing an aggressive main water pipeline replacement program to replace old leaking water pipes since 2001. Over the past several years, an average of 10,000 feet of pipeline per year has been replaced. It is estimated that replacement of all of the existing old pipelines in the entire system will occur over the next eight-year period. As a result of the completion of this replacement work, MCWD hopes to achieve a reduction in water loss within the system of approximately 300 af.

Table IV.N-7 summarizes the new sources of water potentially available to assist in resolving water supply deficiencies.

Table IV.N-7
Future Water Supplies

Project Name	Demand Reduction	Supply Increase	Projected Completion Date
New groundwater development		1,000 af (or amount needed to meet demands)	As needed
Recycled Water Project		400 af	2010
Water Conservation with irrigation restriction enforced	500 af (at build out)		n/a
Water Pipeline Replacement 10-15% loss rate goal	300 af (at build out)		Ongoing, full implementation anticipated by 2011
Total	**800 afy**	**1,400 afy**	

Source: MCWD SB 610 WSA for the 2006 Revised Snowcreek Master Plan (Snowcreek VIII Project).

Table IV.N-8 provides a breakdown of existing water supplies for surface and ground water, plus recycled water and water from future wells.

Table IV.N-8
Existing Water Supply Reliability Plus 2025 Future Water Sources[1]

Supply	Normal Water Year	Single Dry Water Year	Multiple Dry Years			
			Year 1	Year 2	Year 3	Year 4
Projected Surface Water	2,760[2]	0	1,780	1,500	1,100	1,084
Projected Groundwater Wells	4,000[3]	3,410	3,410	3,408	3,408	3,408
Future Groundwater	1,000	1,000	1,000	1,000	1,000	1,000
Future Recycled Water	360	360	360	360	360	360
Projected Total Supply	**8,120**	**4,770**	**6,550**	**6,268**	**5,868**	**5,852**

[1] Units of measure are acre-feet (af) per year. An af equals approximately 325,829 gallons.
[2] Total MCWD is "entitled" to. This amount has been used by MCWD.
[3] 4,000 afy is the total MCWD has a "right" to. This amount has been used by MCWD.

Note: While MCWD currently has surface water rights that total a maximum of 2,760 af annually, the bypass flow requirements that MCWD operates under have not been permanently established and the final bypass requirements that are eventually established could potentially result in less surface water being available to MCWD. In addition, the volume of groundwater noted in this table is the maximum amount of groundwater that MCWD has projected to pump in any given year and does not necessarily represent the safe yield of the aquifer.

Source: MCWD SB 610 WSA for the 2006 Revised Snowcreek Master Plan (Snowcreek VIII Project).

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the *CEQA Guidelines*, the Project could have a significant environmental impact if it would:

(a) require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant effects; or

(b) have insufficient water supplies available to serve the project from existing entitlements and resources, or would require new or expanded entitlements.

Water Services Issues Not Analyzed Further

In 2004, MCWD completed modifications to the Lake Mary surface Water Treatment Plant (Plant) to meet new standards of the California Department of Health Services. As a result of these modifications, the production capacity of the Plant is now rated at the 5 cfs diversion rate allowed for in the water rights

permit.[29] These improvements have enabled MCWD to utilize the full 2,760 af of water available from its state water right permits in normal and wet precipitation conditions.[30] The Project would receive a mixture of treated surface water from the Lake Mary Water Treatment Plant, and treated groundwater from Groundwater Treatment Plant No. 1, located off Old Mammoth Road near Snowcreek Athletic Club.[31] According to MCWD, these two treatment plants have sufficient treatment capacity to serve the Project's demand for water. It is also possible that groundwater from Groundwater Treatment Plant No. 2 at the corner of Majestic Pines Drive and Meridian Boulevard could supply the Project area occasionally.[32] As such, the increased demand for water services generated by the Project would not result in the need for a new or expanded water treatment facility to be constructed. Therefore, ***no impact*** would occur, and no further analysis of this issue is required.

Project Impacts and Mitigation Measures

The 2005 UWMP included proposed development associated with the Town's General Plan Update Draft EIR. While the current updates to the Town General Plan are an ongoing process, the General Plan Update Draft EIR represents the best, most current information regarding potential future development in the community. For this reason, MCWD included the unit counts in the General Plan Update Draft EIR dated October 2005 in the preparation of its 2005 UWMP. In addition, as explained in detail in Section III (Project Description), approval of the 1981 Master Plan allowed for the construction of a total of 2,368 units, with 1,223[33] units remaining to be constructed (refer to Table III-1 and Figure III-1). Therefore, since the 1981 Master Plan was included both in the Town's General Plan Update Draft EIR and in the 2005 UWMP, it can be assumed that the development figures used to prepare the 2005 UWMP included the Project. Thus, according to Water Code section 10910 (c) (2), the analysis of water demand for the Project may be incorporated from the UWMP.

Impact UTIL-5 Water Supply

The Project proposes the development of 1,050 dwelling units and up to 75,000 square feet for non-residential uses. According to the United States Census Bureau's Census 2000 data, the Project is anticipated to generate 2.44 persons per household, which could result in approximately 2,562 new residents.[34] This is a conservative estimate due to the fact that the Project's proposed households would not likely be occupied year round. As such, the demand for domestic water in the Town would increase

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[29] *MCWD, http://www.mcwd.dst.ca.us/ProjectsReports/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

[30] *Ibid.*

[31] *Hegeman, Ericka, Public Affairs and Environmental Specialist, Mammoth Community Water District, telephone conversation with CAJA staff, May 10, 2007.*

[32] *Hegeman, Ericka, Public Affairs and Environmental Specialist, Mammoth Community Water District, email correspondence CAJA staff, February 8, 2007.*

[33] *The Project is proposing the development of 1,050 dwelling units, resulting in 173 less dwelling units than the development projected under the 1981 Master Plan.*

[34] *United States Census Bureau's Census 2000 data uses 2.44 persons per household.*

as a result of the Project. Given the fluctuations characteristic of the Town's tourism pattern, the majority of the proposed residential units and commercial uses are likely to be occupied seasonally rather than on a year-round basis and therefore would not use water over the course of an entire year. Table IV.N-9 represents the water generation rates analyzed for average day and peak day flows. Additionally, it should be noted that at the time of the Project WSA was prepared, MCWD was not proposing to service the Outfitters' Cabin (1,700 sq ft) located at the far eastern boundary of the Project site, near the base of Sherwin Range. However, it has since been determined that MCWD can provide water services to the Outfitters' Cabin through a separate agreement. MCWD determined that the nominal volume of water needed, approximately 0.3 afy, to supply the restroom and ancillary needs for the Outfitters' Cabin is available and would be provided through a separate agreement for MCWD customers located outside of the MCWD service area.[35]

Based on the methodology described above, as indicated in Table IV.N-9, the Project's estimated average water demand is approximately 204,152 gpd (229 afy) and the peak water demand is 316,133 gpd (354 afy).[36] According to the existing water supply available to the MCWD (refer to Table IV.N-3 above) there is sufficient water supply at average and peak times in both normal and multiple dry years for the Project. Thus, Project impacts to water use within the Town would be considered ***less than significant*** and no mitigation measures are required.

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[35] *Sisson, Gary, General Manager, Mammoth Community Water District, written correspondence CAJA staff, February 2, 2007. This letter is included in Appendix L of this Draft EIR.*

[36] *The Project WSA did not calculate peak water use. The generation rates as shown in Table IV.N-6 are based on estimates provided by MCWD.*

Table IV.N-9
Project Estimated Water Demands

Unit Type	Size	Average Daily Generation Rate*	Total Average Gallons Per Day (GPD)	Peak Daily Generation Rate*	Total Peak GPD
RESIDENTIAL	**Dwelling Units (du) / Hotel Rooms**				
Homes (Condominiums)	850 du	170 gpd/unit	144,500	295 gpd/unit	250,750
Hotel Rooms/Suites & Private Residence Club (PRC)/suite units	400[(1)] rooms	100 gpd/unit	40,000	105 gpd/unit	42,000
NON-RESIDENTIAL	**Square Feet (sf)**				
Old Mammoth Commercial					
Market/General Store	3,500	12.8 gpd/1,000 sf	45	100 gpd/1,000 sf	350
Natural Resources & Historic Interpretive Center	900	50 gpd/1,000 sf	45	100 gpd/1,000 sf	90
Hotel					
Spa/Wellness Center	12,900	435 gpd/1,000 sf	5,612	514 gpd/1,000 sf	6,631
Retail	10,000	150 gpd/1,000 sf	1,500	280 gpd/1,000 sf	2,800
Restaurant/Bar/Lounge	10,000	580 gpd/1,000 sf	5,800	685 gpd/1,000 sf	6,850
Conference/Meeting Space	25,000	70 gpd/1,000 sf	3,125	90 gpd/1,000 sf	2,250
Golf Pro Shop	3,000	15 gpd/1,000 sf	45	100 gpd/1,000 sf	300
Resident's Club	8,000	435 gpd/1,000 sf	3,480	514 gpd/1,000 sf	4,112
Outfitters' Cabin[(2)]	1,700	n/a	n/a	n/a	n/a
		Total Water Demands	**204,152**		**316,133**

[(1)]Hotel would accommodate 250 guest rooms/suites (125 dwelling units) and 150 Private Residence Club (PRC) suite rooms (75 dwelling units); total 400 rooms/suites. Under Town Code a hotel room/suite or private residence room equals ½ of a unit, thus the 400 Hotel rooms/suites equates to 200 dwelling units.
[(2)]The Outfitters' Cabin is outside of the MCWD service area, however, it has since been determined that MCWD can provide water services to the Outfitters' Cabin through a separate agreement.
** Calculated from 36 months of usage.*
1 acre foot = 325,851 gallons
Source: 2006 Revised Snowcreek Master Plan WSA (Snowcreek VIII Project) and July 2006 Generation Rates from MCWD.

Because the Project would not result in any significant impacts related to water service, no mitigation measures are required. However, to further reduce the Project's demand on water services, the following measures are recommended:

Mitigation Measure UTIL-5a Water Supply

The applicant should ensure that the landscape irrigation system be designed, installed and tested to provide uniform irrigation coverage. Sprinkler head patterns shall be adjusted to minimize over spray onto walkways and streets.

Mitigation Measure UTIL-5b Water Supply

The applicant should install either a "smart sprinkler" system to provide irrigation for the landscaped areas or, at a minimum, set automatic irrigation timers to water landscaping during early morning or late evening hours to reduce water losses from evaporation. Irrigation run times for all zones shall be adjusted seasonally, reducing water times and frequency in the cooler months (fall, winter, spring). Sprinkler timer run times shall be adjusted to avoid water runoff, especially when irrigating sloped property.

Mitigation Measure UTIL-5c Water Supply

The applicant should select and use drought-tolerant, low-water consuming plant varieties to reduce irrigation water consumption.

Mitigation Measure UTIL-5d Water Supply

The applicant should install low flush water toilets and urinals and shall limit the number of showerheads to one high efficiency fixture per stall, in new construction. Low-flow faucet aerators should be installed on all sink faucets.

Mitigation Measure UTIL-5e Water Supply

The applicant shall be subject to the provisions of a recycled water ordinance adopted by the Town pursuant to Article 10.9, beginning with Section 65601 of the Government Code, and titled Water Recycling in Landscaping Act (Act) at such time as the Town is notified by the Mammoth Community Water District of the future availability of recycled water, at costs reasonably competitive with the costs of untreated groundwater. In addition, the Snowcreek Master Plan shall include a provision that, for all projects constructed or approved prior to the notice, the applicant shall use their best efforts to use recycled water consistent with the Town, the Act, and water district policy.

In addition to using recycled water, untreated well water may be used for irrigation of the golf course expansion (Areas E2, E4, and F) area. At this time, mitigation requirements for the use of recycled water or untreated well water have not been determined. However, if recycled water or untreated well water is used for irrigation, options shall be explored to limit recycled water or untreated well water from entering the tributary area that flows toward Mammoth Creek. Mitigation measures for the use of reclaimed water or untreated well water are specifically described in Section IV.G, Hydrology in Mitigation Measure HYD-1, but could include increasing the capacity of on-site retention for the Golf course areas irrigated with recycled water or well water to include capacity for a storm of 100 year intensity and grading southeasterly limits of the golf course expansion area in some locations to block tributary drainage from the south and direct it east toward Sherwin Creek Road.

Mitigation Measure UTIL-5f Water Supply

The applicant should install Energy Star dishwashers, clothes washers, and refrigerators.

Impact UTIL-6 Water Infrastructure:

The Project includes installation of water infrastructure within the Project site to convey water from the existing MCWD water lines to usage points within the Project. However, design plans for this internal Project water supply distribution system are not complete at this time. Figure IV.N-1, shown previously, illustrates the existing water infrastructure that serves the Project area. According to MCWD, areas of potential deficiency have been identified in water lines in the Project area depending on where the Project would connect with existing water lines. The applicant would be responsible for all costs associated with the installation of water infrastructure on the Project site and the connection fees paid to MCWD for the Project would help to pay for the necessary upgrades to the MCWD's water pipelines described above. In consideration of the above, Project impacts related to wastewater infrastructure would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact UTIL-7 Cumulative Water Supply

Implementation of the Project in combination with the related projects in Table II-1 would further increase demands on water supply and conveyance infrastructure. With respect to the Town's overall water supply condition, the water supply requirements for any project that is consistent with the Town's General Plan Update Draft EIR have been taken into account in the planned growth of the water system in the 2005 UWMP. According to the Town, all of the related projects are generally consistent with their respective land use designations. The MCWD has developed an expected total water demand for the Town of 4,898 afy at Town buildout utilizing the unit counts projected in the Town of Mammoth Lakes General Plan Update DEIR (October 2005), including the related projects as presented in Table II-1 and Table IV.N-2. As discussed previously and illustrated in Table IV.N-6, there would be insufficient supplies of water during dry years at Town buildout without the Project. Consequently, as shown in Table IV.N-10, there would also be insufficient water for the Project plus the related projects during dry water years. Deficiencies of over 1,000 af would occur in a single dry year, which is considered the lowest historical runoff for the watershed. Thus, impacts of the Project together with the related projects on overall MCWD water supply during single and multiple dry year scenarios would be ***significant.***

Table IV.N-10
Existing Water Supply
Comparison of Current Supply and Demand With Project Plus Related Projects[(1)]

Current Supply			Multiple Dry Water Years			
	Average/ Normal Water Year	Single Dry Water Year	Year 1	Year 2	Year 3	Year 4
Supply Total	6,760	3,410	5,190	4,908	4,508	4,492
Cumulative Demand Total	4,898	4,898	4,898	4,898	4,898	4,898
Difference	**1,862**	**-1,488**	**292**	**10**	**-390**	**-406**

(1) Units of measure are acre-feet (af) per year. An af equals approximately 325,821 gallons.
Source: MCWD SB 610 WSA for the 2006 Revised Snowcreek Master Plan (Snowcreek VIII Project).

As stated previously, MCWD is working to develop new groundwater sources, use recycled water, and implement water restrictions as a means to increase supplies to resolve any potential water supply deficiencies during drought periods. However, even with full implementation of these various water supply projects, it is expected that insufficient water would be available to meet projected demand during a single dry year (refer to Table IV.N-11 below). Therefore, because these future water sources do not exist at present the Project's contribution to overall water supply demand within the Town would be cumulatively considerable, and cumulative water supply impacts would be ***significant***. Implementation of the following mitigation measure would help to reduce the significant cumulative water supply impacts, however cumulative water supply impacts would remain ***significant***.

Mitigation Measure UTIL-7

The Town shall not approve new development applications that would result in a water demand in excess of available supplies as determined by the Mammoth Community Water District. The Town shall work with Mammoth Community Water District to ensure that development projects include phased demand increases so that the development of necessary additional water supply sources is established prior to respective development demand occurring.[37]

[37] *This mitigation measure shall be made a policy of the 2007 General Plan. FPEIR General Plan Update May 2007, page 4-286.*

Table IV.N-11
2025 Future Water Sources
Comparison of Supply and Demand With Project Plus Related Projects[1]

2025 Supply			Multiple Dry Water Years			
	Average/ Normal Water Year	Single Dry Water Year	Year 1	Year 2	Year 3	Year 4
Supply Totals	8,120	4,770	6,550	6,268	5,868	5,852
Cumulative Demand Totals	4,898	4,898	4,898	4,898	4,898	4,898
Difference	**3,222**	**-128**	**1,652**	**1,370**	**970**	**954**

Units of Measure: acre-feet (af) per year.
Note: The supply totals on this table assume 1,000 af of future groundwater well water and 360 af of recycled water would be utilized in normal water years.
Source: 2006 WSA Revised Snowcreek Master Plan (Snowcreek VIII Project).

Impact UTIL-8 Cumulative Water Infrastructure

Mammoth Community Water District (MCWD) has identified deficiencies in the water lines that serve the Project area that, depending on where the Project connects with existing water lines, could be exacerbated by the Project and the related projects. The pipeline replacement work is currently scheduled to occur between 2010 and 2013, and MCWD has stated that the work must be done prior to full occupation of the Project area. MCWD has developed future demand projections for the General Plan Update Draft EIR that resulted in plans for some infrastructure improvements. The potential need for the related projects to require upgraded water lines to accommodate their water demands requires site-specific evaluation and there is little, if any, cumulative relationship between the development of the Project and the related projects. In addition, the connection fees paid by individual applicants would help to pay for the necessary upgrades to the water lines described above. In consideration of the above, cumulative impacts related to water infrastructure would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts to water services would be ***less than significant*** and although implementation of the recommended mitigation listed above would reduce the Project's contribution to overall cumulative impacts, the cumulative impacts would remain ***significant and unavoidable***.

At this time, the specifics of system-wide improvements needed to provide adequate water supplies to meet cumulative water demand during single and multiple dry year scenarios are unknown since the Final EIR for the Mammoth Creek Project that will specify water amounts available to MCWD has not been certified. In addition, new or expanded groundwater production wells in the Mammoth Basin would require environmental review and hydrogeologic analysis to ensure that additional volumes of water can be safely extracted. Well development in the Dry Creek Basin would also require environmental review and hydrogeologic analysis. Until these analyses are complete and specific projects have been approved to supplement MCWD's existing water supply, cumulative impacts associated with the Project and related projects would remain ***significant and unavoidable.***

V. GENERAL IMPACT CATEGORIES

A. SUMMARY OF SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(b) of the *CEQA Guidelines* requires that an EIR describe any significant impacts which cannot be avoided. Specifically, Section 15126.2(b) states:

> "*Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reason why the project is being proposed, notwithstanding their effect, should be described."*

Based on the analysis contained in this EIR, implementation of the Project would result in significant unavoidable environmental impacts relative to the following:

- **Aesthetics.** The Project would result in significant unavoidable impacts to public views and scenic vistas, visual character, and light and glare. The Project would result in significant impacts to scenic vistas by altering the visual character of the site, which would be apparent to viewers looking south toward the Sherwin Range from public areas near the Project site. The Project would represent a substantial change in the visual character of the Project site by constructing housing and resort uses on a formerly undeveloped meadow. Although the Project would be required to implement and be consistent with all Town ordinances related to outdoor lighting, the introduction of light and glare on a formerly undeveloped meadow would create a new source of light or glare that would be noticeable and would expand the existing lit footprint of the Town.

- **Air Quality.** The Project would result in significant unavoidable impacts to air quality from Project construction generated PM_{10} emissions as well as cumulative impacts from construction generated PM_{10} emissions. These PM_{10} emissions that cannot be reduced to zero with the implementation of the recommended mitigation.

- **Utilities.** The Project would result in significant unavoidable cumulative impacts to water supply. Even with full implementation of various planned water supply projects, it is expected that insufficient water would be available to meet projected demand during a single dry year. Therefore, because these future water sources do not exist at present the Project's contribution to overall water supply demand within the Town would be cumulatively considerable.

Despite these significant unavoidable impacts, the Project is being proposed to allow the construction of previously proposed and planned for land uses, to provide these land uses in the smallest environmental footprint and with the greatest amount of open space area, to provide needed housing and employment opportunities to Town residents, and to provide recreational amenities to the Town residents and visitors.

B. GROWTH INDUCING IMPACTS OF THE PROPOSED PROJECTS

Section 15126.2(d) of the *CEQA Guidelines* requires a discussion of the ways in which a proposed action could be growth inducing. This includes ways in which the project would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Section 15126.2(d) of the *CEQA Guidelines* reads as follows:

> "*Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some project which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."*

The Project includes development of a total maximum of 1,050 new dwelling units and 75,000 square feet of non-residential development. The Project would include condominiums, workforce housing, a resort Hotel and non-residential development. As discussed in detail in Section IV.J (Population and Housing), implementation of the Project would increase the permanent residential population on the Project site by 2,562 persons.[1] Current population patterns in the Town indicate that households similar to those proposed by the Project are not occupied year round; therefore this is a conservative estimate. This new on-site residential population would likely patronize local businesses and services in the area, fostering economic growth. Although the Project would provide short-term employment opportunities, which would likely be filled from the local employee base and from construction specialists (e.g., crane operators, steelworkers, masons, etc.) that move from job site to job site as dictated by the demand for their skills, the permanent jobs associated with the Project's 75,000 square feet of non-residential space would serve the convenience needs of residents and would be accessible from within the site only. Because it is not expected that the nature of the jobs that would be provided by the Project would cause employees from surrounding areas to relocate their places of residence to the Project area, the Project would not result in long-term employment growth in the area. However, for a conservative analysis, as previously discussed in section IV.J (Population and Housing), it is assumed that all 925 employees would relocate to the area, introducing 925 employee-related residents to the Town through indirect population growth due to permanent jobs. The Project is not a regionally-significant employer, and although the Project would provide employment opportunities, fostering some economic growth, most of

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[1] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, March 14, 2006.*

the jobs would likely be filled by people in the local employment base, and the Project would not induce additional population growth.

The Project site is located in an area that is surrounded by open space and residential land use developments and is served by existing roadways, utility infrastructure, and service systems. The Mammoth Community Water District provides sanitary sewer and water service to majority of the Project site, but does not serve the 94 acres acquired in the 2005 United State Forest Service (USFS) Land Exchange. The amount of water consumed and wastewater generated by the Project would not require or result in the construction of new treatment facilities or the expansion of existing facilities. Additionally, the Project would not require new or expanded water entitlements. The permitted landfill in Mono County has the capacity to accommodate the Project's solid waste disposal needs. The Project would participate in the Town's recycling and refuse collection service to the Project site. The Project would not require the expansion of landfill capacity. Therefore, the Project would not foster population growth by removing an obstacle to growth.

The Project site is located in a developed, urban area with existing public services (i.e., police, fire protection, schools, parks and recreation and snow removal). Public services to the Project site and area are currently provided by the Town of Mammoth Lakes Police Department, the Mammoth Lakes Fire Protection District, Mammoth Unified School District, the Town of Mammoth Lakes Parks and Recreation Department, the Town of Mammoth Lakes Public Works Department and Caltrans, respectively. As discussed in Section IV.K (Public Services), the residential population generated by the Project would result in an increased demand for the public services provided by the agencies listed above. Although the police and fire departments would need to hire new staff to accommodate the demands created by the Project, no new or altered police or fire protection facilities would be needed. The Project would require new school facilities for the school district serving the Project area. However, based on Section 65996 of the California Government Code, the Project applicant would be required to pay the established Developer Impact Fees. The payment of such fees is deemed to fully mitigate the impacts of new development on school services. The proposed recreational amenities in conjunction with the Town's current facilities and the collection of Developer Impact Fees that support the Town's park and recreation fund would be adequate to accommodate the Project's demand for parks and recreational services.[2] (see Appendix M) Therefore, the Project would not tax the existing community services facilities by requiring the construction of new public facilities that would cause significant environmental effects.

As discussed in greater detail in Section III (Project Description), the Project would involve a revision to the 1981 Master Plan that would result in replacement of the 1981 Master Plan with a new master plan. The new master plan would change the land area and land uses set forth in the 1981 Master Plan for the remaining portion of the Snowcreek Master Plan area that has not been developed. The Project would

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[2] *Town of Mammoth Lakes Municipal Code Chapter 15.16 §15.16.085 part E, CAJA staff, April 14, 2006.*

require an amendment to the 1987 General Plan. The 1987 General Plan is currently in the process of being updated following a four-year planning and review process. A Draft Program EIR was previously prepared and circulated regarding an earlier version of the General Plan Update. A Notice of Preparation (NOP) for the Draft Program EIR was distributed on April 25, 2003. A Draft Program EIR was prepared and distributed to the public for review in April from February to May 2005 and was revised in September 2005 for public comments. Based on the extent and range of comments received, the Town determined that the proposed General Plan should be revised to the extent that required recirculation of a Revised Draft Program EIR. The Revised Draft Program EIR was circulated for public review from October 31, 2005 to December 14, 2005. The Town adopted the 2007 General Plan on August 15, 2007 and is currently considering the Revised Final Program EIR on the General Plan Update for certification. Because the certification of the Revised Final Program EIR is an ongoing process, the standard for analysis used in this Draft EIR is based on both the 1987 General Plan and the 2007 General Plan.

The 1987 General Plan land use designations for the Project site are Resort (R), Open Space (OS), and Open Space Stream Corridor (OSSC). These land use and zoning designations describe the design focus for development at the Project site. The 2007 General Plan also designates the Project site as Resort (R) and Open Space (OS). The R designation allows commercial mixed uses including visitor lodging, amenities and services, and workforce housing.

The Resort (R) designation is generally applied to large parcels capable of providing a complete resort experience as found in the Snowcreek, Sierra Star and Juniper Ridge resort areas of the Town. As described in greater detail in Section II (Environmental Setting) and Section IV.H (Land Use & Planning), a Resort development should provide mixed uses consistent with a mountain resort experience, offering distinctive services and activities. The development should be planned with activities appropriate for the area, which may include visitor lodging, recreational amenities, commercial services that support the resort atmosphere, meeting spaces, transit facilities and interconnections to the community's and public trail systems. The design of the area should assure a functional and distinctive pedestrian-scaled environment that will encourage visitors to return to the Town.

The Open Space (OS) designation is applied to lands that have significant recreational or environmental values and permits development of facilities that support the environmental and recreational objectives of the community. The Project would be consistent with the Resort and OS land use designations.

The Project does not require a General Plan amendment to the 2007 General Plan. However, a General Plan amendment is required to the 1987 General Plan. The requested 1987 General Plan amendment necessary to adopt the Snowcreek VIII, Snowcreek Master Plan Update - 2007 is not a precedent-setting action that could lead to growth, given that such actions occur often and are a regular aspect of the planning process for towns and counties. The degree to which the requested discretionary action associated with the Project would encourage or facilitate other amendments to the General Plan for areas in the vicinity of the Project site to allow uses that are not consistent with the existing land use designations and zoning cannot be estimated at this time. If in the future such actions were requested, the

Town would review those requests on a case-by-case basis to determine the appropriateness of the actions and whether the actions would lead to any significant environmental impacts, as is currently being done for the Project. To allow changes to the land use designation and zoning of any property within the Town is solely at the discretion of the Town decision-makers and is exclusive of the Project.

Additionally, the Project site and surrounding area are part of a "built environment." Thus, if other amendments to the General Plan and zone changes are requested in the future for other properties in the area, the subsequent development that would occur due to approval of the changes would not necessarily be growth inducing, considering that most of the properties in the Project area are already developed with some type of use. For these reasons, the Project would not be considered growth inducing.

C. SIGNIFICANT IRREVERSIBLE CHANGES TO THE ENVIRONMENT

Section 15126.2(c) of the *CEQA Guidelines* states that significant irreversible environmental changes associated with a proposed project shall be discussed, including the following:

(a) Uses of nonrenewable resources during the initial and continued phases of the project that may be irreversible because a large commitment of such resources makes removal or nonuse thereafter unlikely;

(b) Primary impacts and, particularly, secondary impacts (such as highway improvement that provides access to a previously inaccessible area), which generally commit future generations to similar uses; and

(c) Irreversible damage that could result from environmental accidents associated with the project.

The Project site is located in an urbanized area of the Town. Development of the Project would represent a long-term commitment to a more intensive land use of the site. As a result, the Project would involve an irreversible commitment to the use of non-renewable resources during the construction and operation phases in the form of refined petroleum-based fuels, natural gas for space and water heating, and mineral resources used in construction materials.

The Project includes development of a total maximum of 1,050 new dwelling units and 75,000 square feet of non-residential development. The Project would include condominiums, workforce housing, a resort hotel and non-residential development in an urbanized area that is already served by an existing roadway system and utility infrastructure. As stated previously, the 1987 and 2007 General Plan land use designations for the Project site are Resort (R) and Open Space (OS), which are characterized with primary emphasis to visitor lodging, amenities and services and recreation uses. Development in the Resort designation is generally applied to large parcels and is physically connected internally and to all primary visitor oriented destinations with an integrated system of streets, sidewalks, and recreational paths. In addition, the OS land use designation is restricted to recreational uses. Therefore, implementation of the Project would commit future generations to using the Project site for similar uses.

With the exception of common household cleaning solvents, paints, landscape fertilizers, and pesticides typically used in residential and retail/commercial settings, the Project would not involve the routine use, transport, or disposal of hazardous materials. Also, during Project construction the Project applicant would follow all applicable requirements to ensure safe use, storage and disposal of any hazardous materials or wastes that could be used. No significant environmental (contamination) issues occur at the site, and no further investigations relative to the environmental conditions on the site are needed. Therefore, the Project would not result in irreversible damage that could result from environmental accidents associated with the Project.

VI. ALTERNATIVES TO THE PROPOSED PROJECT

INTRODUCTION

The State *CEQA Guidelines* require that EIRs include the identification and evaluation of a reasonable range of alternatives that are designed to reduce the significant environmental impacts of the Project while still meeting the general Project objectives. The State *CEQA Guidelines* also set forth the intent and extent of the alternatives analysis to be provided in an EIR. Those considerations are discussed below.

Section 15126.6(a) of the *CEQA Guidelines* states: "An EIR shall describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparable merits of the alternatives. An EIR need not consider every conceivable alternative to a Project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of Project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason."

Purpose

Section 15126.6(b) of the *CEQA Guidelines* states: "Because an EIR must identify ways to mitigate or avoid the significant effects that a Project may have on the environment, the discussion of alternatives shall focus on alternatives to the Project or its location which are capable of avoiding or substantially lessening any significant effects of the Project, even if these alternatives would impede to some degree the attainment of Project objectives, or would be more costly."

Potentially Significant Project Impacts

The Project impacts that would be significant and unavoidable consist of the following:

- **Aesthetics** – Public Views and Scenic Vistas, Visual Character, and Light and Glare
- **Air Quality** – Construction Generated PM_{10} Emissions

The Project impacts that would be less than significant with mitigation include the following:

- **Biological Resources** – Special-status Plant and Animal Species, Sensitive Natural Communities, Jurisdictional Resources, Wildlife Movement, and Conformance with Town Policies and Ordinances

- **Cultural Resources** – Archaeological Resources, Paleontological Resources, and Human Remains
- **Geology & Soils** – Liquefaction and Soil Instabilities, Volcanic Activity, Soil Erosion/Loss of Topsoil
- **Hydrology & Water Quality** – Water Quality Standards, Groundwater Depletion or Recharge, and Drainage System Capacity
- **Noise** – Exposure of Persons to Excessive Noise Levels (Construction)
- **Public Services** – Police Services
- **Transportation/Traffic** – Cumulative Plus Project Intersection LOS

Project Contributions to Potentially Significant Cumulative Impacts

The Project incremental contribution to cumulative impacts that would be significant and unavoidable consist of the following:

- **Aesthetics** – Public Views and Scenic Vistas and Visual Character
- **Air Quality** – Construction Generated PM_{10} Emissions
- **Utilities** – Water Supply

The Project's incremental contribution to cumulative impacts that would be less than significant with mitigation include the following:

- **Public Services** – Police Services

All other impacts are less than significant and do not require mitigation. Therefore, the choice of Project alternatives for analysis in the EIR focused on those that would reduce or avoid significant aesthetics, air quality, biological resources, cultural resources, geology/soils, hydrology/water quality, noise, public services, transportation/traffic, and utilities impacts.

Project Objectives

As stated above, the range of potential alternatives to the Project shall include those that could feasibly accomplish most of the basic objectives of the Project. The objectives of the Project are as follows:

- To complete the Mammoth Lakes resort experience with a destination resort hotel and residential units in a natural rustic setting that will attract longer year round stays with higher per visitor spending.

- Coordinate all planning criteria with regard to density, land use, open space and environmental protection with the Town of Mammoth Lakes General Plan, Snowcreek Master Plan 2007 and Town of Mammoth Lakes Zoning Code.
- Avoid environmentally sensitive sites and maintain the basic integrity of natural site features.
- Preserve existing tree cover, meadow areas, creeks and other natural site features by incorporating them into the design of land use areas.
- Minimize environmental impacts by carefully siting each building cluster, developing architecture which fits site characteristics, establishing a re-vegetation plan and using innovative construction techniques.
- Create a landmark hotel property providing an icon for Mammoth similar to the Banff Springs Hotel in Alberta, Canada or the Ritz Carlton, Bachelor Gulch Hotel in Beaver Creek, Colorado for the Town by providing a luxury destination rustic resort hotel and neighborhood offering the characteristics of the best North American and European ski resorts.
- Provide year round access to the Sherwin Mountain Range with an Outfitters' Cabin for hiking and biking in the spring, summer, and fall as well as access to the Sherwin Bowl for hike-in downhill skiing as well as snow shoeing and cross country skiing in the winter.
- Phase the development to reflect market demand and to follow the existing growth patterns of Mammoth Lakes.
- Improve road circulation patterns leading to and through the development including a roundabout.
- Provide diverse recreational amenities to promote year-round use including the completion of the golf course from a nine-hole to an 18-hole course, as well as amenities such as a golf clubhouse, a Natural Resources and Historic Interpretive Center (Interpretive Center), and the addition of an Outfitters' Cabin that will serve as a portal to the Sherwin Range and U.S. Forest Service lands for hiking, hike-in skiing and other outdoor activities.
- Blend the building types and densities with surrounding residential developments to provide orderly visual and land use transitions.
- Protect, preserve and/or improve the irrigation and the natural state of the existing Mammoth Creek system.
- With the Hotel as the back drop setting, nestle the residential units in a manner to best utilize the land, maximize views and orientation to open space and recreation, creating an intimate neighborhood.
- Create focal points and view corridors, with a variety of visual experiences.
- Encourage a pedestrian friendly environment by providing transportation with Hotel and Home Owners Association (HOA) shuttle service along with connections and stops for the Town and community mass transit.

- Encourage pedestrian circulation by providing a convenient network of plaza spaces and walks, along with paths and trails providing connectivity to the community.
- Provide adequate parking areas for residents and guests, which are designed as an integral element of the plan.
- Create architectural expressions complementing the Sherwin rustic mountain setting and the icon resort hotel buildings by emphasizing roof lines, building massing, and fitting the varying topographic conditions for the residential units.

Selection of a Reasonable Range of Alternatives

Section 15126.6(c) of the *CEQA Guidelines* states: "The range of potential alternatives to the proposed Project shall include those that could feasibly accomplish most of the basic objectives of the Project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic Project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts."

Alternatives Rejected as Being Infeasible

As described above, Section 15126.6(c) of the *CEQA Guidelines* requires EIRs to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process, and briefly explain the reasons underlying the lead agency's determination. One alternative considered development of the proposed project on an alternate site in the Town of Mammoth Lakes. However, this alternative was rejected for further analysis because the project applicant does not own any other property that would be feasible for this project and can not "reasonably acquire, control or otherwise have access to [an] alternative site" (refer to §15126.6(f)(1) of the *CEQA Guidelines*). Additionally, the Project is proposed as part of an existing master plan, with the intent to complete that master plan including constructing previously envisioned features and amenities for the Snowcreek Master Plan. Thus, this alternative was deemed infeasible**.**

Overview of Selected Alternatives

Four alternatives are evaluated in this analysis: the No Project, Revised Site Plan, Reduced Density, and Increased Density alternatives. Differences between the alternatives may include changes to the proposed uses, site plan, number and average size of the residential units, density, and the amount of non-residential space. A more thorough description of each of the alternatives is provided below and shown in Table VI-1. The alternatives to be analyzed in comparison to the proposed Project include:

Alternative A: No Project Alternative – 1981 Master Plan Buildout

Alternative B: Revised Site Plan Alternative

Alternative C: Reduced Density Alternative

Alternative D: Increased Density Alternative

Table VI-1
Alternatives Project Components Comparison

Land Use	PROPOSED PROJECT	ALTERNATIVE A (No Project)	ALTERNATIVE B (Revised Site Plan)	ALTERNATIVE C (Reduced Density)	ALTERNATIVE D (Increased Density)
NON-RESIDENTIAL					
Non-residential Space	75,000 SF	120,000 SF	120,000	0	75,000 SF
RECREATIONAL/AMENITIES					
Resident's Club/pool area	●	●	●		●
Interpretive Center	●	●	●		●
Store	●	●	●		●
Outfitters' Cabin	●	●	●		●
Golf Course	18-Holes	18-Holes	18-Holes	9-Holes	18-Holes
Driving Range				Relocated	
RESIDENTIAL					
Avg. Residential Unit Size	1,775 SF	1,928 SF(1)	1,775 SF	2,169 SF	1,775 SF
HEIGHT					
Residential Height Limit	45'	45'	45'	35'	60'
Hotel Height Limit	120'	45'	120'	NA	120'
DWELLING UNIT/DENSITY					
Total Buildings	**73**	**39**	**80**	**153**	**49**
Residential Condo	850	636	850	530	986
Hotel/Condo(2)	400	300	400	0	400
Motor Inn(3)	0	150	0	0	0
Total Units	**1,050**	**863**	**1,050**	**530**	**1,186**
DENSITY					
Calculated over 66.27 acres	*1,050/66.27*	*863/66.27*	*1,050/66.27*	*530/66.27*	*1,186/66.27*
Total New Development Site Density	**16 units/acre**	**13 units/acre**	**16 units/acre**	**8 units/acre**	**18 units/acre**
Calculated over 144.15 acres	*1,050/144.15*	*863/144.15*	*1,050/144.15*	*530/144.15*	*1,186/144.15*
Total Project Site Density	**7 units/acre**	**6 units/acre**	**7 units/acre**	**4 units/acre**	**8 units/acre**
Calculated over 345 acres (all Master Plan units)	*2,195/345*	*2,008/345*	*2,195/345*	*1,675/345*	*2,331/345*
Total Master Plan Density	**6.36 units/acre**	**5.8 units/acre**	**6.4 units/acre**	**4.9 units/acre**	**6.8 units/acre**
Development North of Old Mammoth Road	**Yes**	**No**	**No**	**No**	**Yes**

SF = square feet
Notes:
(1) These are estimated square footages based on Snowcreek IV and Snowcreek V square footages for 2-4 bedroom units.
(2) Hotel/Condo Units include the Private Residence Club (PRC)/suite units.
(3) Unit Counts were determined by using ½ density counts for hotel and motor inn units.

Assumptions and Methodology

A project may have the potential to generate significant impacts, but considerations in Project design may also afford the opportunity to avoid or reduce such impacts. The alternatives analysis is presented as a comparative analysis to the proposed Project. The following alternatives analysis compares the potential significant environmental impacts of the four alternatives with those of the proposed Project for each of the environmental topics analyzed in detail in Section IV (Environmental Impact Analysis) of this Draft EIR.

A. NO PROJECT ALTERNATIVE (ALTERNATIVE A)

Description

As required by CEQA, this subsection analyzes a "No Project" Alternative (Alternative A). Under Alternative A, proposed development on the Project site would not be constructed in accordance with the proposed Snowcreek Master Plan but would instead be developed in accordance with existing entitlements as described in the Updated Master Plan for Snowcreek at Mammoth (1981 Master Plan). Similar to the Project, Alternative A would set development standards for the approximately 237-acre site situated within, and surrounded by, the Snowcreek Golf Course. The site plan for Alternative A is shown in Figure VI-1.

Alternative A proposes the construction of 863 residential units (636 residential condominium units, 300 condominium/hotel units, and a 155-unit motor inn) and 120,000 square feet of non-residential space. The 120,000 square feet of non-residential uses could include an interpretive center, outfitters' cabin, recreation-related retail, offices, restaurants, retail, a combination deli/market/liquor store, gas station, convention facilities, children's entertainment, theater, tennis facilities, and a health spa. Alternative A would include the construction of 39 buildings. These include 28 residential buildings, four hotel buildings, and seven non-residential structures. Alternative A would expand the existing nine-hole Snowcreek Golf Course to an 18-hole golf course and remove the driving range. Unlike the Project, all proposed uses would be located south of Old Mammoth Road and none would be located between Old Mammoth Road and Mammoth Creek. The No Project Alternative would include a 45-foot height restriction in keeping with the current zoning restrictions. There would be no density transfer allowed under the No Project Alternative.

The No Project Alternative would constitute an overall reduction in residential density as compared to the Project, with approximately 18 percent fewer residential units (863 units as opposed to 1,050). However, non-residential density would be increased by approximately 38 percent under the No Project Alternative (120,000 square feet as opposed to 75,000). Alternative A also proposes the construction of open space areas; roadways; short-term parking areas; transit, pedestrian and bicycle facilities; landscaping; and lighting on the site. Under Alternative A, a secondary access (Sherwin Creek Road loop) would be constructed near the existing entrance of Snowcreek V, extending eastward toward Sherwin Creek Road. Except as described above, other characteristics (e.g., lighting, landscaping, and utility connections), are assumed to be generally similar to those of the Project.

As of February 2007, a total of 1,145 residential units have been developed with a total of 2,368 units with density bonus approved under the 1981 Master Plan. Alternative A would include the development of the designated residential units and non-residential space on the site. Alternative A would develop these residential uses at a density of 13 dwelling units per acre for the 66-acre development area and a total density of 6 dwelling units per acre for the entire 144-acre project site. Overall density of the entire Snowcreek Master Plan Area (2,008 units over 345 acres) would be approximately 5.8 dwelling units per

acre. The analysis of Alternative A assumes build out of the 1981 Master Plan (with the exception of development of the Sherwin Ski Bowl) as well as development of the related Projects described in Section II.C (Related Projects). The potential environmental impacts associated with Alternative A are described below and are compared to the potentially significant environmental impacts associated with the Project.

Aesthetics

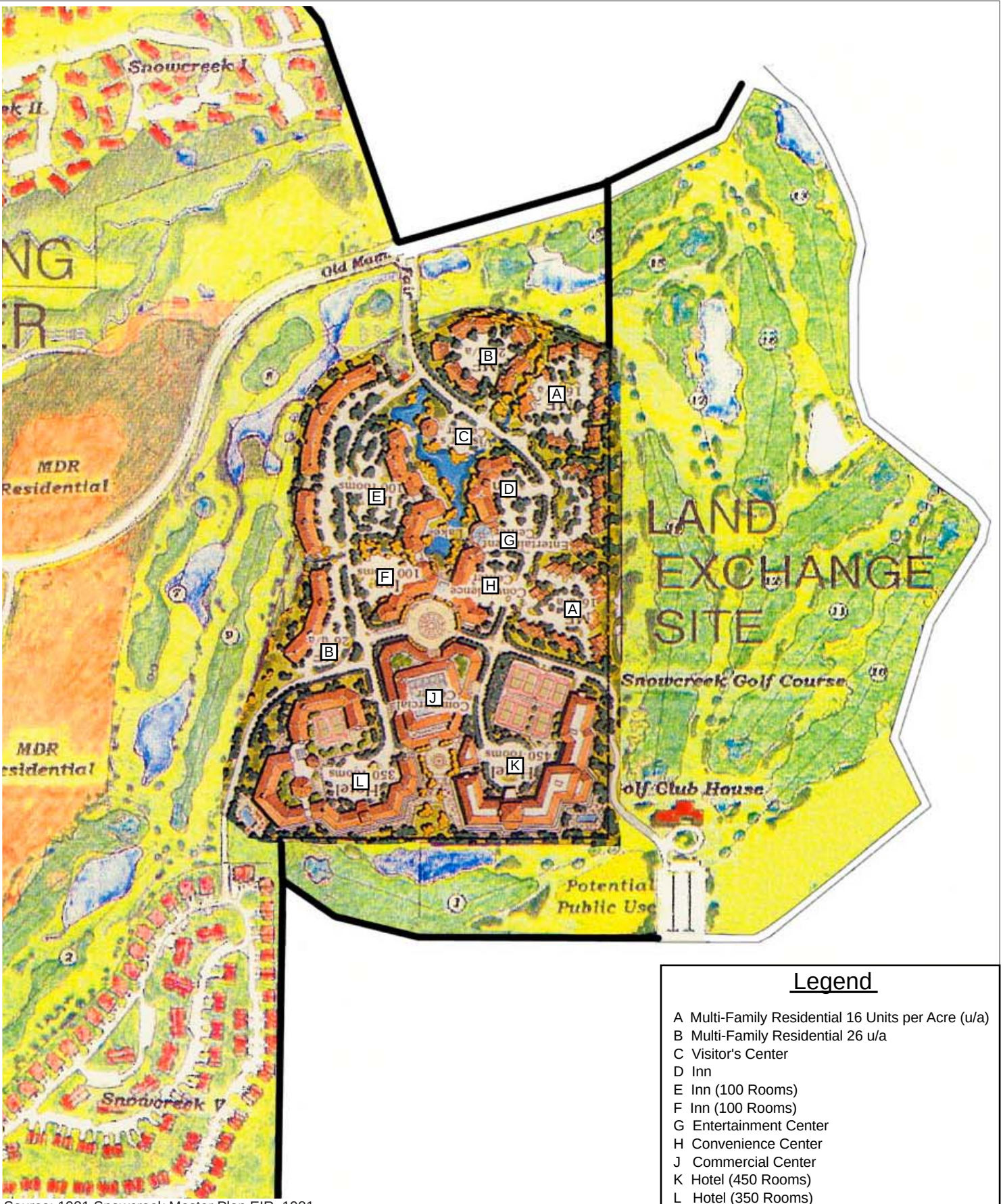
Similar to the Project, Alternative A would result in development on the site (with the exception of the portion of the site north of Old Mammoth Road). Under Alternative A, fewer residential buildings and more non-residential space would be constructed than under the Project resulting in a slightly different combination of building types. Similar to the Project, building design and materials under Alternative A would be consistent with the Snowcreek Master Plan guidelines and would be reviewed by the Town to ensure that the buildings would be responsive and expressive of its unique alpine setting. Similar to the Project, all signage and lighting would be designed in a style that reflects mountain resort community character with regard to materials, form and use. Lighting would comply with the applicable requirements of the Town of Mammoth Lakes Outdoor Lighting Ordinance, in accordance with Mammoth Lakes Municipal Code Chapter 17.34. Building heights would be limited to 45 feet for both residential and hotel uses and impacts to public views and scenic vistas would be less than under the Project. Overall impacts to aesthetics would be less under Alternative A than under the Project.

Air Quality

Alternative A would result in construction activities on the site and would generate a similar amount of construction equipment emissions as under the Project. Operational emissions from stationary sources (natural gas for space and water heating devices, cooking appliances, fireplaces, and operation of landscape equipment) would be similar to the Project as the reduction in residential units would likely be offset by the increase in non-residential development on the site. Non-residential land uses generate more vehicle trips than residential land uses. Therefore, operational emissions of Ozone, respirable particulate matter (PM_{10}) and carbon monoxide (CO) would be slightly more than the Project due to the reduction in residential units and the increase in available retail/non-residential land uses on site. Impacts from odors would be the same as under the Project. Overall impacts to air quality would be greater under Alternative A than the Project due to the increase in vehicle trips created by the increase in non-residential land uses.

Biological Resources

Similar to the Project, Alternative A would result in development on the site (with the exception of the portion of the site north of Old Mammoth Road). This would result in fewer disturbances to the area north of Old Mammoth Road near Mammoth Creek. Although impacts to special-status plant and animal species and riparian habitat near Mammoth Creek would be reduced to less than significant under the Project, the potential for impacts would be further reduced under Alternative A. Also, impacts to wildlife movement, migration corridors, and native wildlife nurseries would be less than under the Project.



Legend

A Multi-Family Residential 16 Units per Acre (u/a)
B Multi-Family Residential 26 u/a
C Visitor's Center
D Inn
E Inn (100 Rooms)
F Inn (100 Rooms)
G Entertainment Center
H Convenience Center
J Commercial Center
K Hotel (450 Rooms)
L Hotel (350 Rooms)

Source: 1981 Snowcreek Master Plan EIR, 1981.

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NORTH

Figure VI-1
Alternative A
No Project Alternative
1981 Master Plan Buildout

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Impacts to trees and vegetation that would conflict with Town of Mammoth Lakes General Plan policies would be less due to the absence of development north of Old Mammoth Road. Impacts to jurisdictional resources would be the same as under the Project. Overall impacts to biological resources would be less under Alternative A than under the Project.

Cultural Resources

Similar to the Project, Alternative A would result in development on the site (with the exception of the portion of the site north of Old Mammoth Road). This would result in fewer construction-related earthmoving activities with the potential to impact cultural resources in the area north of Old Mammoth Road near Mammoth Creek. However, impacts to cultural resources in the area south of Old Mammoth Road would remain the same as under the Project. Overall impacts to cultural resources would be less under Alternative A than under the Project.

Geology and Soils

Under Alternative A, impacts from fault rupture and strong seismic shaking would be the same as the Project. Impacts from liquefaction (the process of moist soils being converted to a liquid state due to seismic shaking), soil instabilities, and soil erosion would be slightly less due to the decrease in development footprint created by the absence of development north of Old Mammoth Road. Impacts from cyclic densification (the process of dry soils becoming compacted due to seismic shaking), landslides and avalanches, volcanic activity and expansive soils would be the same as under the Project. Overall impacts to geology and soils would be less under Alternative A than under the Project.

Hydrology and Water Quality

Similar to the Project, Alternative A would result in development on the site (with the exception of the portion of the site north of Old Mammoth Road). This would result in fewer construction earthmoving activities to the area north of Old Mammoth Road near Mammoth Creek and would decrease the potential for construction impacts to significantly affect water quality. Operation impacts of the Project would likewise be reduced compared to the Project due to the smaller development footprint. Impacts from groundwater depletion or recharge, drainage pattern alteration, and drainage system capacity would be incrementally less than the Project due to the construction of fewer buildings. Similar to the Project, Alternative A would be located entirely outside the 100-year flood zone and this impact would be similar. Overall impacts to hydrology and water quality would be less under Alternative A than under the Project.

Land Use

Alternative A proposes development with an overall density of 5.8 dwelling units per acre over the entire Snowcreek Master Plan development site. Unlike the Project, the density proposed under Alternative A would not exceed the density allowed on the Project site under the 1981 Master Plan. Building heights for residential and non-residential structures proposed under Alternative A would be limited to 45 feet.

Unlike the Project, Alternative A building heights would be consistent with Town of Mammoth Lake Zoning regulations. Therefore, impacts to land use under Alternative A would be less than significant under the Project due to the density and reduced building heights.

Noise

Alternative A would result in construction activities on the site and would generate a similar amount of temporary construction equipment noise and ground-borne vibration as under the Project. Operational impacts resulting from traffic-generated noise would be increased over the Project due to the increase in vehicle trips resulting from the increase in non-residential land uses on the site. Similar to the Project, Alternative A would not be subject to excessive operational ground-borne vibration. Overall impacts to noise under Alternative A would be greater than under the Project due to the increase in traffic created by the increase in non-residential land uses.

Population and Housing

Alternative A would result in the construction of residential units and non-residential land uses. Similar to the Project, construction of Alternative A would result in the creation of temporary construction jobs and the creation of permanent jobs. Similar to the Project, Alternative A would construct housing units within the Town of Mammoth Lakes. These housing units would be consistent with the projections in the 2007 General Plan. Additionally, similar to the Project, Alternative A would include the construction of workforce housing units. Therefore, overall impacts to population and housing would be similar as under the Project.

Public Services

Similar to the Project, Alternative A would result in a temporary increase in population in the Town due to the influx of construction workers and a permanent increase in the population of the Town resulting from the construction of new housing units, which would attract new residents requiring police services. The permanent increase in population would be less under Alternative A due to the reduction in housing units; therefore, this impact would be less than under the Project. Alternative A would also result in the construction of additional residential and non-residential land uses in the Town creating an increase in the demand for fire services. This increase in demand for fire services would be similar to the Project because the decrease in residential units would most likely be offset by the increase in non-residential development.

Similar to the Project, Alternative A would generate students and residents using park facilities. The number of students and residents generated would be fewer than under the Project due to reduction in housing units and this impact would be less than under the Project. Alternative A would require snow removal services. Similar to the Project, these snow removal services would be the responsibility of the Snowcreek Homeowner's Association and this impact would be the same as under the Project. Overall impacts to public services would be less than under the Project.

Recreation

Alternative A would generate fewer residents and would therefore have less impact on recreational facilities in the area than under the Project. Similar to the Project, Alternative A would expand the existing nine-hole golf course to an 18-hole golf course and provide an access point to the Inyo National Forest. Alternative A would also remove the driving range; however, similar to the Project other recreational facilities constructed under Alternative A would offset the loss of this recreational facility. Overall impacts to public services would be less than under the Project.

Transportation/Circulation

Alternative A would result in construction of residential and non-residential land uses. Non-residential land uses generate more vehicle trips than residential uses. Therefore, the number of vehicle trips created under Alternative A would be slightly increased over the Project due to the reduction in residential units and the increase in available retail/non-residential units on site. With the exception of the non-residential area north of Old Mammoth Road (which is not included in Alternative A), Alternative A would be accessed at the same points and would have a similar roadway configuration and emergency access as the Project. Parking under Alternative A would be provided under the same ratios as required by the Town Code that the Project would be subject to. Bicycle and pedestrian facilities and transit facilities would be similar to the Project. Overall impacts to transportation and circulation would be greater than the Project due to the increase in vehicle trips created by the increase in non-residential land uses. Under Alternative A, a secondary access (Sherwin Creek Road loop) would be constructed near the existing entrance of Snowcreek V, extending eastward toward Sherwin Creek Road.

Utilities

Alternative A would result in demand for water supply and in the generation of wastewater from residential and non-residential land uses. Water demand rates and wastewater generation rates for non-residential uses are lower in volume than generation rates for residential uses. Therefore, Alternative A would result in decreased demand for water supply and would generate less wastewater than the Project due to the reduction in residential uses and impacts to water supply and wastewater generation would be less than under the Project. Similar to the Project, Alternative A would require installation of wastewater infrastructure and impacts to wastewater infrastructure would be the same as under the Project. Overall impacts to water supply and wastewater generation would be less than under the Project.

Relationship Of The Alternative To The Objectives

Alternative A would meet most of the Project objectives by completing the Mammoth Lakes resort experience, protecting environmentally sensitive sites and maintaining the basic integrity of natural site features, carefully siting building clusters, developing architecture which fits site characteristics, providing year round access to the Sherwin Mountain Range and a range of diverse recreational amenities, improving road circulation patterns, and encouraging a pedestrian friendly environment.

B. REVISED SITE PLAN ALTERNATIVE (ALTERNATIVE B)

Description

Alternative B proposes the development of 1,050 residential units (850 residential units and 400 Hotel units) and approximately 120,000 square feet of non-residential space on the site. Non-residential uses could include restaurants, conference facilities, Resident's Club with a swimming pool, Private Residence Club (PRC)/suite units as part of the luxury Hotel, Interpretive Center, retail, theatre and plaza area. Alternative B proposes recreational uses consisting of expansion of the golf course, multi-use trails and staging areas (i.e., Outfitters' Cabin), field house, ice skating, and cross-country skiing. Alternative B would include the construction of 80 buildings. These include 65 residential buildings, one hotel building, three Private Residence Club (PRC) buildings, and four non-residential structures. Unlike the Project, all proposed uses would be located south of Old Mammoth Road and none would be located between Old Mammoth Road and Mammoth Creek. Building heights would be the same as under the Project at 45 feet for residential buildings and 120 feet for the Hotel. Similar to the Project, density transfers would be allowed under Alternative B. Alternative B would include the construction of additional access to the site near the intersection of Old Mammoth Road and Sherwin Creek Road. The site plan for Alternative B is shown in Figure VI-2.

Alternative B proposes the same number of residential units developed on the Project site as under the Project. Similar to the Project, Alternative B would set development standards for the approximately 237-acre site situated within, and surrounded by, the Snowcreek Golf Course. Similar to the Project, Alternative B also proposes the construction of open space areas; roadways; short-term parking areas; transit, pedestrian and bicycle facilities; landscaping; and lighting on the site. Building heights would be the same height as the Project.

Alternative B would place the proposed Hotel closer to Old Mammoth Road in order to link it more directly with the existing urban center of the Town. Residential units would be placed to the south, farther from Old Mammoth Road. Non-golf recreational features would be concentrated close to Sherwin Creek Road. Except as described above, other characteristics (e.g., lighting, landscaping, and utility connections) are assumed to be generally similar to those of the proposed Project. The analysis of Alternative B assumes development of the related Projects described in Section II.C (Related Projects). The potential environmental impacts associated with this alternative are described below and are compared to the significant environmental impacts associated with the proposed Project.

As of February 2007, a total of 1,145 residential units have been developed with a total of 2,368 units with density bonus approved under the 1981 Master Plan. Similar to the Project, Alternative B would include the development of a portion of the designated residential units and non-residential space on the site. Alternative B would develop these residential uses at the same density as the Project at 16 dwelling units per acre for the 66-acre development area and a total density of 7 dwelling units per acre for the entire 144-acre project site. Overall density of the entire Snowcreek Master Plan Area (2,195 units over

Source: WRT, 2007.

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Figure VI-2
Alternative B
Revised Site Plan Alternative

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345 acres) would be approximately 6.4 dwelling units per acre. The analysis of Alternative B assumes development of the related Projects described in Section II.C (Related Projects). The potential environmental impacts associated with Alternative B are described below and are compared to the potentially significant environmental impacts associated with the proposed Project.

Aesthetics

Similar to the Project, Alternative B would result in development on the site (with the exception of the portion of the site north of Old Mammoth Road). The portion of the site north of Old Mammoth Road would remain in its current state and there would be no change to the site characteristics. Alternative B would feature the same number of residential buildings, but would feature more non-residential space than the Project. Similar to the Project, building design and materials under Alternative B would be consistent with the Snowcreek Master Plan guidelines and would be reviewed by the Town to ensure that the buildings would be responsive and expressive of its unique alpine setting. Similar to the Project, all signage and lighting would be designed in a style that reflects mountain resort community character with regard to materials, form and use. Lighting would comply with the applicable requirements of the Town of Mammoth Lakes Outdoor Lighting Ordinance, in accordance with Mammoth Lakes Municipal Code Chapter 17.34. Building heights would be the same as the Project for both residential and hotel uses and impacts to public views and scenic vistas would be the same as under the Project. Although changes to the aesthetic character of the site would be reduced due to the lack of development north of Old Mammoth Road, the revised location of the Hotel would place it closer to Old Mammoth Road blocking views of the Sherwin Mountains. Therefore, overall impacts to aesthetics would be increased under Alternative B than the Project.

Air Quality

Alternative B would result in construction activities on the site and would generate a similar amount of construction equipment emissions as under the Project. Operational emissions from stationary sources (natural gas for space and water heating devices, cooking appliances, fireplaces, and operation of landscape equipment) would be similar to the Project. Alternative B proposes the same number of residential units and an increased amount of non-residential space; therefore operational emissions of Ozone, respirable particulate matter (PM_{10}) and carbon monoxide (CO) would be increased from the Project. Impacts from odors would be the same as under the Project. Overall impacts to air quality would be increased from the Project.

Biological Resources

Similar to the Project, Alternative B would result in development on the site (with the exception of the portion of the site north of Old Mammoth Road). This would result in fewer disturbances to the area north of Old Mammoth Road near Mammoth Creek. Although impacts to special-status plant and animal species and riparian habitat near Mammoth Creek would be reduced to less than significant under the

Project, the potential for impacts would be further reduced under Alternative B. Also, impacts to wildlife movement, migration corridors, and native wildlife nurseries would be less than under the Project. Impacts to trees and vegetation that could conflict with Town of Mammoth Lake General Plan policies would be less due to the absence of development north of Old Mammoth Road. Impacts to jurisdictional resources would be the same as under the Project. Overall impacts to biological resources would be less under Alternative B than under the Project.

Cultural Resources

Similar to the Project, Alternative B would result in development on the site (with the exception of the portion of the site north of Old Mammoth Road). This would result in fewer construction-related earthmoving activities with the potential to impact cultural resources in the area north of Old Mammoth Road near Mammoth Creek. However, impacts to cultural resources in the area south of Old Mammoth Road would remain the same as under the Project. Overall impacts to cultural resources would be less under Alternative B than under the Project.

Geology and Soils

Under Alternative B, impacts from fault rupture and strong seismic shaking would be the same as the Project. Impacts from liquefaction (the process of moist soils being converted to a liquid state due to seismic shaking), soil instabilities, and soil erosion would be slightly less due to the decrease in development footprint created by the absence of development north of Old Mammoth Road. Impacts from cyclic densification (the process of dry soils becoming compacted due to seismic shaking), landslides and avalanches, volcanic activity and expansive soils would be the same as under the Project. Overall impacts to geology and soils would be less under Alternative B than under the Project.

Hydrology and Water Quality

Similar to the Project, Alternative B would result in development on the site (with the exception of the portion of the site north of Old Mammoth Road). This would result in fewer construction earthmoving activities to the area north of Old Mammoth Road near Mammoth Creek and would decrease the potential to significantly affect water quality. Operation impacts of the Project would likewise be reduced compared to the Project due to the smaller development footprint. Impacts from groundwater depletion or recharge, drainage pattern alteration, and drainage system capacity would be incrementally less than the Project due to the construction of fewer buildings. Similar to the Project, Alternative B would be located entirely outside the 100-year flood zone and this impact would be similar. Overall impacts to hydrology and water quality would be less under Alternative B than under the Project.

Land Use

Alternative B proposes development of 6.4 dwelling units per acre over the entire Snowcreek Master Plan development site. Similar to the Project, this density would not exceed the density allowed under the

adopted General Plan. Building heights for residential and non-residential structures proposed under Alternative B would be the same as the Project and similar to the Project, Alternative B building heights would not be consistent with Town of Mammoth Lake Zoning regulations. Therefore, impacts to land use under Alternative B would be the same as under the Project.

Noise

Alternative B would result in construction activities on the site and would generate a similar amount of temporary construction equipment noise and ground-borne vibration as under the Project. Project-related vehicle trips would be increased under Alternative B due to the increase in non-residential land uses; therefore, operational impacts would be increased from the Project. Similar to the Project, Alternative B would not be subject to excessive operational ground-borne vibration. Overall impacts to noise under Alternative B would be greater than under the Project.

Population and Housing

Alternative B would result in the construction of residential units and non-residential land uses. Similar to the Project, construction of Alternative B would result in the creation of temporary construction jobs and the creation of permanent jobs. Similar to the Project, Alternative B would construct housing units within the Town of Mammoth Lakes. These housing units would be consistent with the projections in the 2007 General Plan. Additionally, similar to the Project, Alternative B would include the construction of workforce housing units. Therefore, overall impacts to population and housing would be the same as under the Project.

Public Services

Similar to the Project, Alternative B would result in a temporary increase in population in the Town due to the influx of construction workers and a permanent increase in the population of the Town resulting from the construction of new housing units, which would attract new residents requiring police services. The permanent increase in population would be the same under Alternative B as the Project. Alternative B would also result in the construction of additional residential and non-residential land uses in the Town creating an increase in the demand for fire services. The increase in non-residential uses would be greater than under the Project: therefore, the increase in demand for fire services would be greater than under the Project.

Similar to the Project, Alternative B would generate students and residents using park facilities. The number of students and residents generated would be the same as under the Project. However, Alternative B proposes a field house, Outfitters' Cabin and cross-country skiing facilities and impacts to park facilities would be less than under the Project. Alternative B would require snow removal services. Similar to the Project, these snow removal services would be the responsibility of the Snowcreek Homeowner's Association and this impact would be the same as under the Project. Overall impacts to public services would be greater than under the Project due to the increase in non-residential land uses.

Recreation

Alternative B would generate the same number of residents and would therefore have the same impact on recreational facilities in the area as the Project. Similar to the Project, Alternative B would expand the existing nine-hole golf course to an 18-hole golf course and provide an access point to the Inyo National Forest. Alternative B would also remove the driving range; however, similar to the Project other recreational facilities constructed under Alternative B would offset the loss of this recreational facility. Overall impacts to recreation would be the same as under the Project.

Transportation/Circulation

Alternative B would result in construction of residential and non-residential land uses. Due to the increase in non-residential land uses, the number of vehicle trips created under Alternative B would be greater than under the Project and this impact would be greater. Alternative B would differ from the Project by the absence of an access point north of Old Mammoth Road (the non-residential area north of Old Mammoth Road is not included in Alternative B). Alternative B also includes an additional access point at Minaret Road and Sherwin Creek Road. Although emergency access would be improved under Alternative B, this impact is currently less than significant under the Project and this impact would be the same under Alternative B as under the Project. Parking under Alternative B would be provided under the same ratios as required by the Town Code that the Project would be subject to. Bicycle and pedestrian facilities and transit facilities would be similar to the Project. Overall impacts to transportation and circulation would be greater than under the Project.

Utilities

Alternative B would result in demand for water supply and in the generation of wastewater from residential and non-residential land uses. Alternative B would result in an increased demand for water supply and would generate increased amounts of wastewater and impacts to water supply and wastewater generation would greater than under the Project. Similar to the Project, Alternative B would require installation of wastewater infrastructure and impacts to wastewater infrastructure would be the same as under the Project. Overall impacts to water supply and wastewater generation would be greater than under the Project.

Relationship Of The Alternative To The Objectives

Alternative B would meet most of the Project objectives by completing the Mammoth Lakes resort experience, protecting environmentally sensitive sites and maintaining the basic integrity of natural site features, carefully siting building clusters, developing architecture which fits site characteristics, providing year round access to the Sherwin Mountain Range and a range of diverse recreational amenities, improving road circulation patterns, and encouraging a pedestrian friendly environment.

C. REDUCED DENSITY ALTERNATIVE (ALTERNATIVE C)

Alternative C proposes the development of 530 residential units and no non-residential development (including Hotel, Private Residence Club [PRC], Interpretive Center, Market/General Store [Store], or Outfitters' Cabin) would occur on the site. Alternative C would include the construction of 153 residential buildings. This is consistent with current Resort Zoning density standards that permit a maximum of eight units per acre. Additionally, the existing nine-hole Snowcreek Golf Course would not be expanded and that area would remain undeveloped. The existing driving range would remain, but would be relocated to the far southern portion of the site. Under Alternative C, residential units developed on the Project site would be distributed over the 66-acre portion of the Project site now reserved for development with residential and non-residential uses. Alternative C would reduce the number of residential units on the site by approximately 50 percent from the proposed Project (530 units as opposed to 1,050). Similar to the Project, Alternative C would set development standards for the approximately 237-acre site situated within, and surrounded by, the Snowcreek Golf Course. Unlike the Project, all proposed uses would be located south of Old Mammoth Road and none would be located between Old Mammoth Road and Mammoth Creek. Similar to the Project, Alternative C also proposes the construction of open space areas; roadways; short-term parking areas; transit, pedestrian and bicycle facilities; landscaping; and lighting on the site. The site plan for Alternative C is shown in Figure VI-3.

Under Alternative C, building heights would be at or below 35 feet in height. Average square footage of the units would be 2,169 square feet. All roadway alignments and associated grading and drainage improvements would be similar to the proposed Project under Alternative C. Except as described above, other characteristics (e.g., lighting, landscaping, and utility connections), are assumed to be generally similar to those of the Project.

As of February 2007, a total of 1,145 residential units have been developed with a total of 2,368 units with density bonus approved under the 1981 Master Plan. Alternative C would include the development of a portion of the designated residential units, but none of the non-residential space on the site. Similar to the Project, density transfers would be allowed under Alternative C. Alternative C would develop these residential uses at eight dwelling units per acre for the 66-acre development area and a total density of four dwelling units per acre for the entire 144-acre Project site. Overall density of the entire Snowcreek Master Plan area (1,675 units over 345 acres) would be approximately 4.9 dwelling units per acre. The analysis of Alternative C assumes development of the Related Projects described in Section II.C (Related Projects). The potential environmental impacts associated with Alternative C are described below and are compared to the potentially significant environmental impacts associated with the Project.

Aesthetics

Similar to the Project, Alternative C would result in development on the site (with the exception of the portion of the site north of Old Mammoth Road). Under Alternative C, fewer residential units and no non-residential space would be constructed resulting in lower height buildings. Similar to the Project,

building design and materials under Alternative C would be consistent with the Snowcreek Master Plan guidelines and would be reviewed by the Town to ensure that the buildings would be responsive and expressive of its unique alpine setting. Similar to the Project, all signage and lighting would be designed in a style that reflects mountain resort community character with regard to materials, form and use. Lighting would comply with the applicable requirements of the Town of Mammoth Lakes Outdoor Lighting Ordinance, in accordance with Mammoth Lakes Municipal Code Chapter 17.34. Residential building heights would be limited to 35 feet and impacts to public views and scenic vistas would be less than under the Project. Overall impacts to aesthetics would be less under Alternative C than under the Project.

Air Quality

Alternative C would result in construction activities on the site and would generate a similar amount of construction equipment emissions as under the Project. Operational emissions from stationary sources (natural gas for space and water heating devices, cooking appliances, fireplaces, and operation of landscape equipment) would be less than the Project due to the reduction in residential units and absence of non-residential development on the site. Operational emissions of Ozone, respirable particulate matter (PM_{10}) and carbon monoxide (CO) would be less than under the Project due to the reduction in residential units and elimination of non-residential land uses. Impacts from odors would be the same as under the Project. Overall impacts to air quality would be less under Alternative C than the Project due to the decrease in vehicle trips due to the reduction in residential units and absence of non-residential development on the site.

Biological Resources

Similar to the Project, Alternative C would result in development on the site (with the exception of the portion of the site north of Old Mammoth Road). This would result in fewer disturbances to the area north of Old Mammoth Road near Mammoth Creek. Although impacts to special-status plant and animal species and riparian habitat near Mammoth Creek would be reduced to less than significant under the Project, the potential for impacts would be further reduced under Alternative C. Also, impacts to wildlife movement, migration corridors, and native wildlife nurseries would be less than under the Project. Impacts to trees and vegetation that could potentially conflict with Town's General Plan policies would be less due to the absence of development north of Old Mammoth Road. Impacts to jurisdictional resources would be the same as under the Project. Overall impacts to biological resources would be less under Alternative C than under the Project. This page intentionally left blank.

Cultural Resources

Similar to the Project, Alternative C would result in development on the site (with the exception of the portion of the site north of Old Mammoth Road). This would result in fewer construction-related earthmoving activities with the potential to impact cultural resources in the area north of Old Mammoth

Source: Scheurer Architects, 2007.

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Figure VI-3
Alternative C
Reduced Density Alternative

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Road near Mammoth Creek. However, impacts to cultural resources in the area south of Old Mammoth Road would remain the same as under the Project. Overall impacts to cultural resources would be less under Alternative C than under the Project.

Geology and Soils

Under Alternative C, impacts from fault rupture and strong seismic shaking would be the same as the Project. Impacts from liquefaction (the process of moist soils being converted to a liquid state due to seismic shaking), soil instabilities, and soil erosion would be less due to the decrease in development footprint created by the reduction in residential units, elimination of non-residential uses, and the absence of development north of Old Mammoth Road. Impacts from cyclic densification (the process of dry soils becoming compacted due to seismic shaking), landslides and avalanches, volcanic activity and expansive soils would be the same as under the Project. Overall impacts to geology and soils would be less under Alternative C than under the Project.

Hydrology and Water Quality

Similar to the Project, Alternative C would result in development on the site (with the exception of the portion of the site north of Old Mammoth Road). This would result in fewer construction earthmoving activities to the area north of Old Mammoth Road near Mammoth Creek and would decrease the potential to significantly affect water quality. Operation impacts from groundwater depletion or recharge, drainage pattern alteration, and drainage system capacity would be similar to the Project in the area south of Old Mammoth Road since development would occur over roughly the same area, but less than the Project for the area north of Old Mammoth Road. Similar to the Project, Alternative C would be located entirely outside the 100-year flood zone and this impact would be similar. Overall impacts to hydrology and water quality would be less under Alternative C than under the Project due to the lack of development north of Old Mammoth Road.

Land Use

Alternative C proposes development with an overall density of 4.9 dwelling units per acre over the entire Snowcreek Master Plan development site. Similar to the Project, this density would not exceed the density allowed under the adopted General Plan. Building heights for residential and non-residential structures proposed under Alternative C would be limited to 35 feet. Unlike the Project, Alternative C building heights would be consistent with Town of Mammoth Lake Zoning regulations. Therefore, impacts to land use under Alternative C would be less than under the Project due to the reduced building heights.

Noise

Alternative C would result in construction activities on the site and would generate a similar amount of temporary construction equipment noise and ground-borne vibration as under the Project. Operational

impacts resulting from traffic-generated noise would be decreased due to the reduction in vehicle trips resulting from the decrease in residential units and the elimination of non-residential land uses on the site. Similar to the Project, Alternative C would not be subject to excessive operational ground-borne vibration. Overall impacts to noise under Alternative C would be less than under the Project due to the decrease in vehicle trips created by the decrease in residential units and the elimination of non-residential land uses on the site.

Population and Housing

Alternative C would result in the construction of residential units. Similar to the Project, construction of Alternative C would result in the creation of temporary construction jobs and the creation of permanent jobs. Similar to the Project, Alternative C would construct housing units within the Town of Mammoth Lakes. These housing units would be consistent with the projections in the 2007 General Plan. Similar to the Project, Alternative C would include the construction of workforce housing units. Overall impacts to population and housing would be the same as under Alternative C than the Project.

Public Services

Similar to the Project, Alternative C would result in a temporary increase in population in the Town due to the influx of construction workers and a permanent increase in the population of the Town resulting from the construction of new housing units, which would attract new residents requiring police services. The permanent increase in population would be less under Alternative C due to the reduction in housing units; therefore, this impact would be less than under the Project. Alternative C would also result in the construction of additional residential land uses in the Town creating an increase in the demand for fire services. This increase in demand for police and fire services would be less than the Project because the decrease in residential units.

Similar to the Project, Alternative C would generate students and residents using park facilities. The number of students and residents generated would be fewer than under the Project due to reduction in housing units and this impact would be less than under the Project. Alternative C would require snow removal services. Similar to the Project, these snow removal services would be the responsibility of the Snowcreek Homeowner's Association and this impact would be the same as under the Project. Overall impacts to public services would be less than under the Project.

Recreation

Alternative C would generate fewer residents and would therefore have less impact on recreational facilities in the area than under the Project. Unlike the Project, Alternative C would not expand the existing nine-hole golf course to an 18-hole golf course. However, Alternative C would retain the driving range in a different location. Similar to the Project, Alternative C would provide an access point to the Inyo National Forest. Alternative C would include development of other recreational facilities which

would offset the loss of the golf course expansion. Overall impacts to public services would be less than under the Project.

Transportation/Circulation

Alternative C would result in construction of a reduced number of residential units and the elimination of non-residential land uses on the site. Therefore, the number of vehicle trips generated under Alternative C would be decreased from the Project. With the exception of the non-residential area north of Old Mammoth Road (which is not included in Alternative C), Alternative C would be accessed at the same points and would have a similar roadway configuration and emergency access as the Project. Parking under Alternative C would be provided under the same ratios as required by the Town Code that the Project would be subject to. Bicycle and pedestrian facilities and transit facilities would be similar to the Project. Overall impacts to transportation and circulation would be less than the Project due to the decrease in vehicle trips created by the reduction in the number of residential units and the elimination of non-residential land uses on the site.

Utilities

Alternative C would result in demand for water supply and in the generation of wastewater from residential uses. Alternative C would result in decreased demand for water supply and would generate less wastewater than the Project due to the reduction in residential uses and elimination of non-residential uses. Therefore, impacts to water supply and wastewater generation would be less than under the Project. Similar to the Project, Alternative C would require installation of wastewater infrastructure and impacts to wastewater infrastructure would be the same as under the Project. Overall impacts to water supply and wastewater generation would be less than under the Project.

Relationship Of The Alternative To The Objectives

Alternative C would meet many of the Project objectives by protecting environmentally sensitive sites and maintaining the basic integrity of natural site features, carefully siting building clusters, developing architecture which fits site characteristics, providing year round access to the Sherwin Mountain Range and a range of diverse recreational amenities, and improving road circulation patterns.

Alternative C would not meet the Project objective of completing the Mammoth Lakes resort experience, creating a landmark Hotel property, providing needed non-residential land uses (retail, restaurants, etc.) proximate to residential land uses, and expanding the existing privately owned publicly accessible nine-hole golf course to a privately owned publicly accessible 18-hole golf course.

D. INCREASED DENSITY ALTERNATIVE (ALTERNATIVE D)

Alternative D proposes the development of 1,186 residential units (986 residential units and 400 hotel/condo units) and 75,000 square feet of non-residential development. Non-residential land uses would include a Private Residence Club (PRC)/suite units, Resident's Club, Interpretive Center, Store, and Outfitters' Cabin. Additionally, the existing nine-hole Snowcreek Golf Course would be expanded to 18 holes and the driving range would be eliminated. Alternative D would include the construction of 49 buildings. These include 41 residential buildings, one Hotel building, three Private Residence Club (PRC) buildings, and four non-residential structures. Alternative D would increase the number of residential units on the site by approximately 13 percent from the Project (1,186 units as opposed to 1,050). Similar to the Project, Alternative D would set development standards for the approximately 237-acre site situated within, and surrounded by the Snowcreek Golf Course. Similar to the Project, Alternative D also proposes the construction of open space areas; roadways; short-term parking areas; transit, pedestrian and bicycle facilities; landscaping; and lighting on the site. The site plan for Alternative D is shown in Figure VI-4.

Under Alternative D, residential building heights would be at or below 60 feet in height and the luxury Hotel would be at or below 120 feet in height. Average square footage of the units would be 1,775 square feet. All roadway alignments and associated grading and drainage improvements would be similar to the proposed Project under Alternative D. Except as described above, other characteristics (e.g., lighting, landscaping, and utility connections), are assumed to be generally similar to those of the Project.

As of February 2007, a total of 1,145 residential units have been developed with a total of 2,368 units with density bonus approved under the 1981 Master Plan. Similar to the Project, density transfers would be allowed under Alternative D. The density bonus of 36.625 units would not apply to the Project and instead would remain with the Snowcreek Athletic Club property. Alternative D has been prepared to show the impacts of the Project without the density bonus. Alternative D would develop these residential uses at 18 dwelling units per acre for the 66-acre development area and a total density of eight dwelling units per acre for the entire 144-acre project site. Overall density of the entire Snowcreek Master Plan Area (2,331 units over 345 acres) would be approximately 6.8 dwelling units per acre. The analysis of Alternative D assumes development of the Related Projects described in Section II.C (Related Projects). The potential environmental impacts associated with Alternative D are described below and are compared to the potentially significant environmental impacts associated with the proposed Project.

Aesthetics

Similar to the Project, Alternative D would result in development on the site including the portion of the site north of Old Mammoth Road. Under Alternative D, an increased number of residential units and the same amount of non-residential space would be constructed as under the Project. Residential buildings would be taller to accommodate the increased number of units. Similar to the Project, building design and materials under Alternative D would be consistent with the Snowcreek Master Plan guidelines and

Legend

A **Market/General Store**
Natural Resources and
Historic Interpretive Center

B **Hotel**
Guest Suites
Private Residence Club
Retail
Lounge
Restaurants
Wellness Center
Fitness Center
Pool
Spa
Ice Rink/Pond

C/D **High Density**
Stacked Flats

E/F **Medium Density**
Stacked Flats, Townhouse

G/H **Low Density**
Stacked Flats, Townhouse

I **18-Hole Golf Course**

J **Resident's Club/Management Offices**
Vacation Rental Office
Fitness Club
Pool
Spa
Grill

K **Golf Club**
Pro Shop
Restaurant

L **Outfitters' Cabin**
Equipment Rental
Hiking
Mountain Biking
Cross Country Skiing
Snow Shoeing
Sledding
Trail Head

Source: Scheurer Architects, 2007.

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NORTH

0 400 800 1200 1600
Scale (Feet)

Figure VI-4
Alternative D
Increased Density Alternative

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would be reviewed by the Town to ensure that the buildings would be responsive and expressive of its unique alpine setting. Similar to the Project, all signage and lighting would be designed in a style that reflects mountain retreat community character with regard to materials, form and use. Lighting would comply with the applicable requirements of the Town of Mammoth Lakes Outdoor Lighting Ordinance, in accordance with Mammoth Lakes Municipal Code Chapter 17.34. Building heights would be higher than the Project for both residential and hotel uses; 60 feet and 120 feet, respectively. Therefore, impacts to public views and scenic vistas would be greater than under the Project. Overall impacts to aesthetics would be greater under Alternative D than under the Project due to the increase in building heights.

Air Quality

Alternative D would result in construction activities on the site and would generate a similar amount of construction equipment emissions as under the Project. Operational emissions from stationary sources (natural gas for space and water heating devices, cooking appliances, fireplaces, and operation of landscape equipment) would be greater than under the Project due to the increase in residential units on the site. Operational emissions of Ozone, respirable particulate matter (PM_{10}) and carbon monoxide (CO) would be slightly more than the Project due to the increase in residential units. Impacts from odors would be the same as under the Project. Overall impacts to air quality would be greater under Alternative D than the Project due to the increase in vehicle trips created by the increase in residential units.

Biological Resources

Similar to the Project, Alternative D would result in development on the site including the portion of the site north of Old Mammoth Road. This would result in the same area of ground disturbances to the site as the Project. Impacts to special-status plant and animal species and riparian habitat near Mammoth Creek would be the same under Alternative D as under the Project. Also, impacts to wildlife movement, migration corridors, and native wildlife nurseries would be the same as under the Project. Impacts to trees and vegetation that could conflict with Town's General Plan policies would be the same as under the Project. Impacts to jurisdictional resources would be the same as under the Project. Overall impacts to biological resources would be the same under Alternative D as under the Project.

Cultural Resources

Similar to the Project, Alternative D would result in development on the site including the portion of the site north of Old Mammoth Road. This would result in the same amount of construction-related earthmoving activities with the potential to impact cultural resources as the Project. Overall impacts to cultural resources would be the same under Alternative D as under the Project.

Geology and Soils

Under Alternative D, impacts from fault rupture and strong seismic shaking would be the same as the Project. Impacts from liquefaction (the process of moist soils being converted to a liquid state due to

seismic shaking), soil instabilities, and soil erosion would be the same as Alternative D would have the same development footprint. Impacts from cyclic densification (the process of dry soils becoming compacted due to seismic shaking), landslides and avalanches, volcanic activity and expansive soils would be the same as under the Project. Overall impacts to geology and soils would be the same under Alternative D as under the Project.

Hydrology and Water Quality

Similar to the Project, Alternative D would result in development on the site including the portion of the site north of Old Mammoth Road. This would result in the same amount of construction earthmoving activities and the potential to significantly affect water quality would be the same as under the Project. Operational impacts of the Project would be the same as the Project as Alternative D would have the same development footprint. Impacts from groundwater depletion or recharge, drainage pattern alteration, and drainage system capacity would be the same as the Project because of the same development footprint of the buildings. Similar to the Project, Alternative D would be located entirely outside the 100-year flood zone and this impact would be similar. Overall impacts to hydrology and water quality would be the same under Alternative D as under the Project.

Land Use

Alternative D proposes development of 6.8 dwelling units per acre over the entire Snowcreek Master Plan development site. Similar to the Project, this density would not exceed the density allowed under the adopted General Plan. Building heights would be higher than the Project for both residential and hotel uses; 60 feet and 120 feet, respectively, and would not consistent with Town of Mammoth Lake Zoning regulations. Therefore, impacts to land use under Alternative D would be greater than under the Project.

Noise

Alternative D would result in construction activities on the site and would generate a similar amount of temporary construction equipment noise and ground-borne vibration as under the Project. Operational impacts resulting from traffic-generated noise would be increased over the Project due to the increase in vehicle trips resulting from the increase in residential units on the site. Similar to the Project, Alternative D would not be subject to excessive operational ground-borne vibration. Overall impacts to noise under Alternative D would be greater than under the Project due to the increase in traffic created by the increase in residential units.

Population and Housing

Alternative A would result in the construction of residential units and non-residential land uses. Similar to the Project, construction of Alternative D would result in the creation of temporary construction jobs and the creation of permanent jobs. Similar to the Project, Alternative D would construct housing units within the Town of Mammoth Lakes. These housing units would be consistent with the projections in the

2007 General Plan. Additionally, similar to the Project, Alternative D would include the construction of workforce housing units. Therefore, overall impacts to population and housing would be the same as under the Project.

Public Services

Similar to the Project, Alternative D would result in a temporary increase in population in the Town due to the influx of construction workers and a permanent increase in the population of the Town resulting from the construction of new housing units, which would attract new residents requiring police services. The permanent increase in population would be greater under Alternative D due to the increase in housing units; therefore, this impact would be greater than under the Project. Alternative D would also result in the construction of additional residential and non-residential land uses in the Town creating an increase in the demand for fire services. This increase in demand for fire services would be greater than the Project due to the increase in residential units.

Similar to the Project, Alternative D would generate students and residents using park facilities. The number of students and residents generated would be greater than under the Project due to increase in housing units and this impact would be greater than under the Project. Alternative D would require snow removal services. Similar to the Project, these snow removal services would be the responsibility of the Snowcreek Homeowner's Association and this impact would be the same as under the Project. Overall impacts to public services would be greater than under the Project.

Recreation

Alternative D would generate more residents and would therefore have a greater impact on recreational facilities in the area than under the Project. Similar to the Project, Alternative D would expand the existing nine-hole golf course to an 18-hole golf course and provide an access point to the Inyo National Forest. Alternative D would also remove the driving range; however, similar to the Project other recreational facilities constructed under Alternative D would offset the loss of this recreational facility. Overall impacts to public services would be greater than under the Project.

Transportation/Circulation

Alternative D would result in the construction of an increased number of residential units and the same amount of non-residential land uses as the Project. The number of vehicle trips created under Alternative D would be slightly increased over the Project due to the increase in residential units on site. Alternative D would be accessed at the same points and would have a similar roadway configuration and emergency access as the Project. Parking under Alternative D would be provided under the same ratios as required by the Town Code that the Project would be subject to. Bicycle and pedestrian facilities and transit facilities would be similar to the Project. Overall impacts to transportation and circulation would be greater than the Project due to the increase in vehicle trips created by the increase in residential units.

Utilities

Alternative D would result in demand for water supply and in the generation of wastewater from residential and non-residential land uses. Alternative D would result in an increased demand for water supply and would generate more wastewater than the Project due to the increase in residential uses. Therefore, impacts to water supply and wastewater generation would be greater than under the Project. Similar to the Project, Alternative D would require installation of wastewater infrastructure and impacts to wastewater infrastructure would be the same as under the Project. Overall impacts to water supply and wastewater generation would be greater than under the Project.

Relationship Of The Alternative To The Objectives

Alternative D would meet most of the Project objectives by completing the Mammoth Lakes resort experience, protecting environmentally sensitive sites and maintaining the basic integrity of natural site features, carefully siting building clusters, developing architecture which fits site characteristics, providing year round access to the Sherwin Mountain Range and a range of diverse recreational amenities, improving road circulation patterns, and encouraging a pedestrian friendly environment.

E. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

In addition to the discussion and comparison of impacts of the proposed Project and the alternatives, Section 15126.6 of the *CEQA Guidelines* requires that an "environmentally superior" alternative be selected and the reasons for such a selection disclosed. In general, the environmentally superior alternative is the alternative that would be expected to generate the least amount of significant impacts. Identification of the environmentally superior alternative is an informational procedure and the alternative selected may not be the alternative that best meets the goals or needs of the Town.

Table IV-2 summarizes the comparative impacts of each of the alternatives when compared to the Project (the table does not list cumulative impacts). The table lists the level of significance of the impacts of the Project to each environmental topic analyzed in Chapter IV and shows whether the impacts anticipated under each proposed alternative would be lesser, similar, or greater than the proposed Project. The table provides a comparison of the ability of each alternative to avoid or substantially reduce the significant impacts of the Project.

The Project under consideration cannot be identified as the Environmentally Superior Alternative. Based on this analysis, Alternative A (No Project) was not identified because its impacts to air quality, noise, and transportation and circulation were greater than those of the Project. Alternative B (Revised Site Plan) was not identified because its impacts to aesthetics, air quality, noise, public services, transportation and circulation, and utilities and service systems were greater than those of the Project. In addition, Alternative D (Increased Density) was rejected as the Environmentally Superior Alternative because its impacts to aesthetics, air quality, land use and planning, noise, public services, recreation, transportation and circulation, and utilities and service systems were also greater than those of the Project. Alternative C (Reduced Density) would be the Environmentally Superior Alternative because it would reduce significant impacts to aesthetics, air quality, biological resources, cultural resources, geology and soils, hydrology and water quality, land use, noise, public services, recreation, transportation and circulation, and utilities as compared to the Project. However, Alternative C does not satisfy the Project objectives.

Table VI-2
Alternatives Impacts Comparison

IMPACT AREA	PROPOSED PROJECT	ALTERNATIVE A (No Project)	ALTERNATIVE B (Revised Site Plan)	ALTERNATIVE C (Reduced Density)	ALTERNATIVE D (Increased Density)
Aesthetics	S	—	+	—	+
Air Quality	S	+	+	—	+
Biological Resources	LTS/M	—	—	—	=
Cultural Resources	LTS/M	—	—	—	=
Geology & Soils	LTS/M	—	—	—	=
Hydrology & Water Quality	LTS/M	—	—	—	=
Land Use and & Planning	LTS	—	=	—	+
Noise	LTS/M	+	+	—	+
Population & Housing	LTS	=	=	=	=
Public Services	LTS/M	—	+	—	+
Recreation	LTS	—	=	—	+
Transportation & Circulation	LTS/M	+	+	—	+
Utilities & Service Systems	S	—	+	—	+

Key:
S = Significant Impact
LTS = Less-than-Significant Impact
LTS/M = Less-than-Significant Impact with Mitigation
\+ = Impact greater than the Project
= = Impact similar to the Project
— = Impact less than the Project

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